

100 INSPIRATIONAL WOMEN IN MINING 2018

#WIMADVOCATE

#WIMINSPIRE

www.womeninmining.org.uk



CONTENTS

BMO Foreword	1
About Women in Mining	2
Women in Mining Foreword	3
Biographies	5
2013 Edition	116
2015 Edition	117
Women in Mining Board and Committees	119
Disclaimer	124

BMO FOREWORD



Jeff Couch,
Head of Investment and
Corporate Banking, Europe



Lisa Schlegel,
Vice President, Investment
and Corporate Banking

BMO®
We're here to help.™

BMO is honoured to introduce the Top 100 Global Inspirational Women in Mining in 2018 for another year.

We are very pleased to see the continuation of this publication showcasing a great variety of inspiring women with interesting careers in the Metals & Mining sector. As the marketplace becomes increasingly challenging, diversity is key to the success of any business.

While this publication represents a fantastic opportunity to appreciate the success stories of numerous female role models currently in the sector, we must also remember the sector continues to face diversity shortcomings. A need for more gender balanced representation at the board and senior management level provides just one example where the sector needs to lead from the front.

Given that the Global Metals & Mining sector is core to BMO, we are pleased to champion diversity further – on a sector-specific level. BMO continues to be passionate about diversity, which is a priority reinforced by our senior leadership team – including our recently appointed BMO Capital Markets CEO Dan Barclay. For the 4th consecutive year, BMO is sponsoring a scholarship at Imperial College London specifically to encourage the next generation of women to pursue Mining and Energy finance. We were excited by our recent hire of one of our scholarship holders into the London office of our Global Metals & Mining team. The industry has seen steady progress around diversity, but the creation of a strong pipeline of candidates will assist the long term development of more women.

We have significant respect for all the achievements by the impressive women featured in this publication and would like to congratulate each one of them. We would also like to take the opportunity to pay tribute to all the women active in the Metals & Mining sector and to their daily work contributing to its sustainability and growth.

ABOUT WOMEN IN MINING

Founded in 2006, Women in Mining (WIM) is a non-profit organisation dedicated to promoting the employment, retention and advancement of women in the mining industry.

WIM **advocates** and speaks for women in the mining sector, informing industry participants and decision-makers of the challenges and opportunities women are finding in pursuing careers in mining companies and other mining-related businesses.

Through its partnerships with leading mining companies and consultancy groups, WIM provides **thought leadership**, analysis, and research on the business case for diversity, inclusion and the economic advancement of women in the sector.

WIM offers a **strong international network** to progress professional goals and career aspirations. This network enables our membership to exchange ideas and information, create connections and raise the profile of women in the mining sector, both locally and globally through our affiliations with other WIM groups worldwide.

WIM provides its membership with **visibility** on the global conference circuit, working with leading event organisers to showcase the breadth and depth of female professional talent and ensuring diversity of speakers and experts.

Through our work with universities and other organisations, WIM **promotes** the role of women in the mining industry and externally raises awareness of mining as a career choice for women.

WIM **celebrates** and shares female success stories with its "100 Global Inspirational Women in Mining" publications and through its social media channels.

Join us
Attend our popular events and networking forums. Membership is complimentary to women and men across the industry.

Visit www.womeninmining.org.uk/register to sign up and join in.

Follow us

@WIM_UK @WomenInMiningUK Women in Mining (UK)

WOMEN
IN MINING

WE LOOK FORWARD TO WELCOMING YOU!

WOMEN IN MINING FOREWORD



Carole Cable,
Board Chair



Nichole McCulloch,
Managing Director

Welcome to the third edition of the "100 Global Inspirational Women in Mining" kindly sponsored by BMO for the second time.

This is a living history of women who work in mining around the world and, through their stories, they show us how they have persevered in the face of adversity, how they have found solutions to challenges, and how they are empowering others by being a voice and role model for diversity and inclusion. Their stories provide inspiration and valuable insight for all.

We received a record response for this edition – 642 nominations – from men and women recognising their colleagues for their significant contributions to the industry, going above and beyond their daily responsibilities, not just "great at their jobs", but also inspiring others. We acknowledge and celebrate you all.

While the business case for diversity and inclusion is widely recognised and many mining companies have begun to change the way in which they approach this issue, change across the sector as a whole has been slow. Complacency appears to be the biggest challenge and without a deliberate goal of prioritising diversity and inclusion as making good business sense, the pace of change is unlikely to improve.

This book highlights the incredible diversity of talent in mining and we believe the recognition and celebration of these inspirational women and their stories are integral to changing attitudes in the sector. This is not just a woman's issue; this book is an inspiration to all people and all generations – present and future – who work in mining and want to be part of a rewarding career to build a sustainable future.

We celebrate the 100 inspirational women from around the world in this book. We also acknowledge the 642 women who were nominated and the countless other women working in mining who contribute to this incredible industry.

WOMEN IN MINING

"CONGRATULATIONS TO THIS YEAR'S 100 GLOBAL INSPIRATIONAL WOMEN IN MINING."


GAUZERMAX

2018 100 WOMEN IN MINING LIST

Janet **Adeyemi** 06
Gloria **Alorchie-Apetor** 07
Bayan **Alzhanova** 08
Maree **Arnason** 09
Cecilia **Arrue** 10
Alexandra **Atkins** 11
Thuthula **Balfour** 12
Carol **Banducci** 13
Juana **Barcelo** 14
Megan **Becker** 15
Maryse **Belanger** 16
Hannah **Bester** 17
Farana **Boodhram** 18
Jennifer **ten Broeke** 20
Nicole **Brook** 21
Michelle **Carey** 22
María **del Carmen García** 23
Angie Ivonne Caro **Astorga** 24
Kelly **Carter** 25
Belina **Charlie** 26
Rebecca **Charlton** 27
Sandra **Close** 28
Christine **Coignard** 29
Laura **Cristoffanini** 30
Robyn **Dittrich** 31
Noreen **Doyle** 33
Jo-Anne **Dudley** 34
Nicole **Duncan** 35
Lana **Eagle** 36
Claire **Esbenshade** 37
Catharine **Farrow** 38
Johanna **Fipke** 39
Resa **Furey** 40
Elizabeth **Gaines** 41
Allison **Golsby** 42
Daria **Goncharova** 43
Gabriela **Grijalva** 44
Kate **Harcourt** 45
Wendy **Hutchinson** 46
Tzvet **Ilarionova** 48
Kesego **Jarona** 49
Meryl **Jones** 50
Maria **Joyce** 51
Madina **Kaparova** 52
Leanne **Kemp** 53
Tracey **Kerr** 54
Racquel **Kolkert** 55
Sally-Anne **Layman** 56
Andrea C. **Lemus** 57
Carmen **Letton** 58
Oy **Leuangthong** 59
Elif **Levesque** 61
Xiaoling **Liu** 62
Christine **Logbo-Kossi** 63
Susan **Lomas** 64
Gabriela **Love** 65
Nolundi **Luthuli** 66
Thabile **Makgala** 67
Denise **McComish** 68
Gargi **Mishra** 69
Claudia **Monreal** 70
Tebogo **Mosito (Mashego)** 71
Malebogo **Mpugwa** 72
Deshnee **Naidoo** 73
Lindiwe **Nakedi** 74
Wollen **Nell** 76
Wilhemina **Ngcobo** 77
Kay **Nimmo** 78
Viridiana **Nuñez** 79
Jakeline Claudia **Olivos Cruz** 80
Lynn **Olssen** 81
Beatrice **Opoku-Asare** 82
Jacinta **Parsons** 83
Alexandra **Pascal** 84
Dineo **Phaladi** 85
Beatrice **Pierre** 86
Sara **Prendergast** 87
Mona **Quartey** 88
Catherine **Raw** 89
Marny **Reakes** 90
Janet **Reuben-Lekashingo** 92
April **Richardson-Schuch** 93
Agnes **Ritter** 94
Silvia Rene **Rodriguez** 95
Anne Marie **Rushworth** 96
Ana **Sanches** 97
Maria (Ria) **Sanz Perez** 98
Shivani **Sharma** 99
Makhosazana **Sibisi** 100
Stella **Skosana** 101
Kamilla **Slowikowska** 103
Marcia **Smith** 104
Ami **Soumare** 105
Namrata **Thapar** 106
Violeta **Vigo** 107
Dhakshi **Weerawardena** 108
Susanna **Woodward** 109
Jennifer **Wyllie** 111
Shannon **Youd** 112
Nompumelelo **Zikalala** 113

For Janet Adeyemi, the road to a career in the resources sector started with a harrowing encounter at the Rayfield mine in Jos, Nigeria. There, she saw women and children out in the field, trying to scratch a living from tin mining. Janet was moved to action. "I joined the resources sector to ensure that the plight of women and children is exposed and heard," she says. From that day forward, this has been her defining goal.

As CEO of engineering company Jabridep Nig Ltd, and as Founder and President of Women in Mining Nigeria, Janet advocates for the equity and inclusion of women in the sector. She is committed to responsible governance, gender justice and the promotion of sustainability in mining. She also works to advance the idea of shielding host communities from harm – a cause defined by that early encounter in the tin field.

Janet has also served in various capacities of governance in Nigeria, including in the Federal House of Representatives.



JANET ADEYEMI

Company: Jabridep Nig Ltd

Title: Chief Executive Officer, and National President of Women in Mining Nigeria

Country: Nigeria

"A woman wanting to enter the industry must ensure that she has basic knowledge in her area of participation. I would encourage her to join or network with the Women in Mining groups and to be undaunted by any obstacles on her path."

WOMEN
IN MINING



"I always told myself I sat in the same class and wrote the same exams as men did, so I should be able to fit in and work just like them. This helped me believe there was no way I could fail."

GLORIA ALORCHIE-APETOR

Company: Newmont Ghana Gold Limited

Title: Senior Maintenance Planner

Country: Ghana

Gloria Alorchie-Apetor came to mining when, during her national service, she was posted to a school in a mining village. Gloria watched the miners in their work gear waiting to board the buses to work and was curious – could she do that? A quick phone call to the mining company confirmed that they accepted national service personnel, and a career was born.

Trained as an electrical engineer, Gloria recalls her induction into mechanical engineering as particularly challenging. "I had no idea what I was doing initially, but the fear of failing kept me going," she recalls. Getting her head around the task took research, study, perseverance and the right support, but she succeeded.

Over the years, Gloria has worked hard to add skills to her portfolio, now counting SAP, project management, electrical and maintenance planning and instrumentation technics in her skill set. Her constant hunger for new challenges and the skills to meet them set her apart – and provide a powerful example for other women who might be wondering, "Could I do that?"

WOMEN IN MINING

Bayan Alzhanova fell in love with geology as a child, exploring her small village with her seven siblings and becoming the de-facto chief identifier of interesting rocks and minerals found along the way. Graduate and post-graduate qualifications in geology opened up the field to Bayan and introduced her to the subsoil language – her lifelong favourite occupation.

Almost 40 years ago, Bayan joined the Zhezkazgan mining and metallurgical plant as a young specialist. Today, as a multi-award winning Chief Geologist and widely regarded expert, Bayan is engaged in the evaluation of resources and reserves of deposits and proposes potentially productive deposits for both exploration and production. She monitors exploration activities at operational deposits to look for further growth opportunities, and puts a lot of her energy into training the next generation of specialists.

Despite having nearly four decades of experience under her belt and no longer needing to go on site, Bayan continues to descend into the mines and work in the open pit, insisting on taking a hands-on approach to the work she loves.



BAYAN ALZHANOVA

Company: KAZ Minerals PLC

Title: Group Chief Geologist

Country: Kazakhstan

"Once, I heard that women go into mining to 'brighten up the lives of men'. But I believe there's no difference between men and women when we consider intellectual ability and potential. I am a worthy and equally professional employee, who complies with the qualification requirements and performance required – regardless of whether I was a woman or a man."



MAREE ARNASON

Company: Sandfire Resources NL, MZI Resources Ltd

Title: Non-Executive Director

Country: Australia

"Over 20 years ago, I was involved in responding to several workplace fatalities and this has never left me. It was a confronting and challenging time, but it remains at the centre of everything – to ensure the safety of people who work in the industry and communities where we operate."

Maree Arnason grew up in Western Australia's remote Pilbara region and started her career at BHP's Mount Whaleback mine straight out of high school. Maree's values, work ethic and potential were recognised, and BHP supported her tertiary education and moved her to Melbourne to work in corporate office on key transformational projects – opportunities that allowed her to move into senior leadership and executive roles.

With an executive career spanning over 30 years, Maree has significant experience in complex corporate, project and change environments with a focus on reputation, risk, strategy and governance. Maree's willingness to stand up for what she believes is right has defined her career, and earned her a nomination for BHP's Courage to Lead global award. "Ultimately, my bravest moments have been about my preparedness to act with courage and integrity against significant pressure to remain silent," she says.

Maree is co-founder and director of Energy Access Services, an online wholesale gas trading platform, and has been an active mentor and contributor to the not-for-profit and community sector for over 25 years. Maree is a life member of the Australia China Business Council and serves on the Australian Securities and Investments Commission's Director Advisory Panel.

With a 21-year career spanning different geographies (Chile and Canada), commodities (copper, nickel and PGMs), processes (mining, processing) and functions (leadership, planning, engineering and operations), Cecilia Arrue is nothing if not versatile. But that's only half the story. She is also the mother of 13-year-old twins, one of whom has a genetic syndrome – an experience that has taught her the importance of integration, inclusion and tolerance.

Cecilia started her career at Codelco in Chile. Then, in what she describes as the most challenging time in her life, she moved to Falconbridge in Canada – changing country, home, job and language at the same time as her infant son's condition was diagnosed.

Rather than be defeated by the experience, Cecilia persevered, growing professionally and rising to the personal challenge. Returning to Chile two years later in a more senior role, she was soon offered greater opportunities, expanding her expertise and earning accolades as an outstanding woman in Chilean mining. Today, at Antofagasta, Cecilia takes pride in driving gender equality and inclusion in Chile's mining industry – her "most exciting time" yet.



CECILIA ARRUE

Company: Antofagasta Minerals S.A.

Title: Processing Technical Manager

Country: Chile

"Mining's biggest challenge is to increase and sustain the social validation of our industry in the long term. We need to make step changes in safety, environment and health performance, improve the quality of life for people who work in mining and live in surrounding areas, increase the incorporation of new technologies and dramatically reduce the industry's environmental footprint."

WOMEN
IN MINING



"Once the family comes along, the male model of work no longer works for many women. But for those who stick with it by adapting, reskilling, consulting or regulating, the rewards are great. It would be great to see many more women in the leadership ranks of the global mining industry, especially STEM women."

ALEXANDRA ATKINS

Company: Alex Atkins & Associates Pty Ltd

Title: Managing Director

NED: AusDrill and AusIMM

Country: Australia

Despite spending most of her working hours in the office or boardroom these days, Alex Atkins' heart is still underground.

Early in her career, Alex recalls being awestruck by the "amazing" airleg miners and the women working underground when they had only just won the legal right to do so. In awe and utterly inspired, Alex became one of those trailblazers, putting in more than five years underground, obtaining airleg experience and eventually working as Porgera JVs (PNG) first female underground mining engineer.

The move was so unusual at the time that Alex required ministerial clearance to make it happen. But for a person inspired since childhood by so-called outsiders like Amelia Earhart, Nelson Mandela and Martin Luther King, following her passion was the only option – even if it meant swimming against the stream.

Today, Alex continues to draw inspiration from the women around her, particularly the senior female STEM leaders who have made it onto boards and into the C-suite whilst raising families and contributing to the community.

WOMEN IN MINING

Thuthula Balfour is a qualified doctor who brings medical and occupational health expertise to her position of Health Adviser at the Minerals Council South Africa, an employer organisation that includes names like Anglo American, De Beers, Gold Fields and Harmony.

A specialist in public health medicine who also has an MBA, Thuthula advocates for the industry on health issues. She also chairs the Chamber Health Policy Committee, which is focused on tuberculosis, HIV and AIDS, and the prevention of silicosis and noise-induced hearing loss.

Keenly interested in advocacy, lobbying and stakeholder management, Thuthula's proudest professional moments were also often her toughest: facilitating difficult conversations between stakeholders. That challenge, she says, is what keeps her around. "I have stayed in mining much longer than I had planned and this is due to the dynamic nature of the work I do, the challenges one has to confront on the health front and the difference that one is making. There is still much that can be done to improve the health of employees in the mining sector," she says.



THUTHULA BALFOUR

Company: Minerals Council South Africa

Title: Head of Health

Country: South Africa

"The industry's biggest challenge is to be acceptable to communities. Communities are more vocal about the impact of mining on their livelihoods and a delicate balance needs to be struck between mining and how it benefits the country and communities in the immediate vicinity."



CAROL BANDUCCI

Company: IAMGOLD Corporation

Title: EVP & Chief Financial Officer

Country: Canada

"Mining is an exciting global industry, full of complexities, challenges and very talented individuals. We need to bring more diversity to the mining sector and fully take advantage of the broader talent pool."

An accomplished leader who has held senior positions in some of Canada's top mining and resources companies, Carol Banducci's career is notable for her dedication to helping others.

In 2016, Carol founded the Miner's Lamp Award with the University of Toronto's Department of Psychiatry to raise funds for research into mental illness in youth. The campaign has received strong support from the business and academic communities, raising $2 million since inception. She has also co-chaired a non-profit organisation dedicated to helping disadvantaged youth across Canada.

"I grew up in a nurturing family where we were brought up to believe that we could achieve anything we set our sights on and worked hard at," says Carol.

Carol hasn't shied away from making tough calls when it comes to doing what she believes is right. "My bravest moment was when I called out leaders in the mining community to change the format of an industry sponsored initiative to make it more gender sensitive," she recalls. Her courage was rewarded: "Everyone recognised the need to change and embraced it."

Coming from a developing country with a very high poverty rate, Juana Barcelo was inspired by witnessing the positive socio-economic impact of the Pueblo Viejo mine in the Dominican Republic. The mine contributed to the country's biggest environmental clean up (due to prior operation by the government) and made serious strides towards reducing poverty in nearby communities. For Juana, it felt like mining could be a means to drive much-needed change in her country.

After completing an LLM in the US, Juana began her career in law, working on mining, energy, mergers and acquisitions. She joined Barrick Pueblo Viejo as Legal Director in 2009, and nine years later moved to her current role, where she is responsible for the license to operate the Pueblo Viejo Mine – a project she has been involved with since early investment was approved.

For Juana, leading a mining company has brought not only the satisfaction of working in a sector she enjoys, but the chance to give back, both by driving national revenues and by empowering local women.



JUANA BARCELO

Company: Barrick Pueblo Viejo

Title: President/Executive Director

Country: Dominican Republic

"In my opinion, the biggest challenges facing the industry are regulatory risk and obtaining and maintaining social license. These challenges can be met through responsible mining with state-of-the-art technology, by engaging host governments and by sharing profits with host countries and communities."

"The multifaceted challenges the industry faces sometimes seem to be 'wicked problems' – especially considering the negative legacy of the mining industry. But without minerals and metals, society cannot achieve the sustainable development goals. Education plays a pivotal role in overcoming these challenges. A holistic approach that combines many skill sets is essential."



MEGAN BECKER

Company: Centre for Minerals Research, Department of Chemical Engineering, University of Cape Town

Title: Associate Professor

Country: South Africa

There is a lot of focus on getting more women into the industry, into senior roles and the C-suite, but Megan Becker is making her impact earlier in the value chain: academic research and university education.

Megan is passionate about minerals, teaching, and applying her own intellectual curiosity to the industry she loves. The resulting career balances academic research, teaching and supervising postgraduate students, and developing new courses for undergraduates and professionals. Megan is also an inventor, having established a state-of-the-art electron microscope based on quantitative mineralogical analysis facility to support mining-related industry research. Her research, which addresses minerology right through the value chain, prompted the South African National Research Foundation to name her a "young researcher with the potential to become a future leader in her field."

For Megan, the best part of the job is, in a sense, the end: "For each student, graduation symbolises the passing of a season of shaping and nurturing. I then have the privilege of watching each student enter the industry and create their own success story," she says.

Maryse Belanger is a company executive focused on building organisations, projects and teams and driving operational performance. Able to work effectively in English, French, Spanish and Portuguese, Maryse has provided oversight and project management support for some of the mining industry's key strategic acquisitions.

In her current position, Maryse takes a lead role in executing Atlantic Gold's business plan and strategy, looking for new opportunities and leading stakeholder and investor relations. She was previously CEO and MD of Mirabela Nickel Ltd. where she led the turnaround and cost cutting success at the Santa Rita mine in Brazil during a period of extremely low metal prices. Before that, Maryse oversaw the global geology, mine planning and design, metallurgy, hydrology, tailings dam and geotechnical engineering functions at Goldcorp.

Maryse credits "incredible role models and mentors" with helping her grow both as a professional and as an executive. Yet despite her own position, she is pessimistic on progress towards diversity, especially at the executive and board levels. "At the present rate of progress, gender parity may never be achieved," she says.



MARYSE BELANGER

Company: Atlantic Gold Corporation

Title: Chief Operating Officer and Director

Country: Canada

"Mining's biggest challenge is attracting, developing and retaining technical talent. Mining is a highly complex business and the industry has to be prepared to treat its professionals better."



HANNAH BESTER

Company: Glencore PLC – Mutanda Mining/ Kamoto Copper Company SARL

Title: Group Logistics Manager

Country: Democratic Republic of the Congo

"Fortunately, I have seen a lot of growth in diversity within my organisation and region. It's such a multidisciplinary industry with people from all parts of the worlds and different walks of life. It's an aspect of my job that I really value."

Hannah Bester came to the mining industry through an unusual pathway: health research.

After completing a Master's in Public Health in the USA, Hannah moved to Lusaka, Zambia to work as an administrator in an HIV research unit conducting behavioural studies and clinical trials on HIV and related diseases. From there, she moved to the Lualaba province of the Democratic Republic of Congo, taking a logistics role with Mutanda Mining.

The country and industry were a fit, and designing and establishing the inbound supply chain for Mutanda's processing facilities and mining operations offered Hannah the kind of challenge she craved. Six years on, in 2014, Hannah took an additional role at Kamoto Copper Company, standardising operational procedures, identifying and implementing best practices and exploiting the synergies of the two supply chains of the closely linked Glencore mining operations.

Working in a fast-moving, vital industry in a very dynamic country, Hannah doesn't have to look far for motivation. "My continued inspiration comes from the dedicated, hardworking Congolese young professionals who are the lifeblood of our companies," she says.

Over 18 years in the logistics and mining industries, Farana Boodhram has developed a habit of tackling problems she has experienced first-hand – and succeeding.

Farana founded Avita, a company that specialises in underground roof support, rib side support and ventilation after being exposed to underground mining in a flammable low seam mine. She also designed and patented Forever Farana Coveralls, a PPE garment women can wear underground. With protective padding in the right places and the option to turn the one-piece garment into two when nature calls, it's the solution to problems Farana experienced herself – problems she hopes other women can now avoid. Coveralls are made in South Africa by people with disabilities and are compliant with regulator guidelines.

When Farana isn't reshaping the mining industry, she's working on what she describes as her "mission": eradicating poverty by levelling the playing field for women and children. Her MiDesk initiative is part of this: a patented wheelie school bag that converts into a desk and chair for millions of kids without desks at schools in the rural areas.



FARANA BOODHRAM

Company: Avita Mining

Title: Chief Executive Officer

Country: South Africa

"Challenges will always mushroom because of diversity and perhaps the expectations some male colleagues have of females. My voice was not always heard and my concerns weren't always considered until I raised my voice higher and made sure I was listened to, harder. Perseverance is what got me here, and perseverance is what's going to keep me here."


Swit P 31102



"The mining industry's biggest challenge is retaining experience and keeping our people safe in a world that is always in a hurry for more product. My advice to women entering the mining industry is simple: take it for what it is, respect those around you, and never give up on your dreams."

JENNIFER TEN BROEKE

Company: South32 Ltd

Title: OBC Supervisor

Country: Australia

The daughter of a cattleman, Jennifer ten Broeke spent the first 18 years of her professional life working alongside her father. Ten years ago, she moved into mining at Cannington with BHP Billiton, following that with a role as a Commissioning Plant Supervisor for Newmont at the remote Tanami gold mine in Central Australia. From there she joined Rio Tinto in the Pilbara as a Mechanical Fixed Plant Supervisor working in iron ore.

Around this time, muscle degradation due to multiple sclerosis forced Jennifer into a wheelchair.

She took a two-year break before finding the opportunity she needed: a role as an Overland Bauxite Conveyor Supervisor on the 50k feed from the mine to the refinery, with a company willing to adapt the site to her mobility needs.

As a disabled woman, Jennifer has a unique vantage point on inclusion. But rather than gender, she points to another kind of bias: "If anything, it's not so much male vs female as young vs old. This is getting far worse and we are losing experience because of it," she says.

Nicole Brook started her career as an underground coal miner. In those early years, Nicole recalls working at a site that was facing closure due to some unexpected geology. "Seeing the effects of that on the workforce and local businesses that relied on work at the mine fuelled my passion for understanding the environment in which we mine, and made me determined to get involved in creating mining opportunities," she says.

Today she is doing just that, leading the team responsible for evaluating acquisition and merger opportunities, identifying organic growth projects and providing technical support to mining operations.

Nicole is inspired by the people around her: the mining engineer so passionate about her job that she drives five hours to a rural community to talk about the minerals industry, or the geologist who job shares so he can pursue remote exploration work and still raise a family. "It is these people, giving it their all, that motivate me to create a culture of inclusiveness and collaboration for everyone who wants to contribute to our industry," she says.



NICOLE BROOK

Company: Glencore PLC

Title: General Manager Business Development and Technical Services

Country: Australia

"Our biggest challenge is the perception that society doesn't need mining anymore, whether driven by expectations around environmental management or decreasing awareness of how minerals are used in everyday life. This has impacted the number of students pursuing mining-related studies."

WOMEN IN MINING



MICHELLE CAREY

Company: Imdex Limited

Title: General Manager Product Development

Country: Australia

"Be yourself. One of the biggest challenges for me has been to succeed without changing who I am at the core in order to fit in. Indeed I had to make some career changes to achieve this. If we don't achieve this then industry diversity will remain a distant aim."

Michelle Carey has over 20 years of experience in an array of geochemical specialist and senior management roles. She has forged her own path, taking tough posts at a time when few women were around. Michelle looks back on a student job at Kambalda as her bravest moment. She was one of few females at the camp, sticking it out at the single persons' quarter and knowing no one. "Frankly, I was terrified. Only determination not to fail kept me there," she says.

More than two decades later, Michelle fears that progress towards greater diversity and inclusion has slowed to the point of stopping. Alongside her work to bring innovation and new technology into mining and exploration is a parallel effort to bring cultural change into the industry. Both are struggling.

"In so many areas we need to innovate and adopt new technologies but we don't, or we do so only very slowly. If we don't adapt we will be disrupted," she says. "I stay in mining because I see how much my industry needs to change and I want to be a part of making that happen."

Raised in a coal mining region, in a family where everyone, "in some way or other," worked in the industry, María del Carmen García's career choice seemed preordained. Once she got there, however, her path was all her own.

Maria made her career at Encasur, southern Spain's main coal company, working in coordination and general services before taking an early retirement. She served as Treasurer, Secretary and Dean of the College of Mining Engineers of the Córdoba region, and was the first woman President of the Spanish Higher Council of Mining Engineers, as well as the first female engineer to hold this position in Spain.

Despite no longer working full time, Maria is still tightly connected to the industry. She is active in the defence and promotion of the mining and geological heritage of Spanish coal-mining regions, as well as the industrial architecture associated to this industry. She is also president of Fundación Cuenca del Guadiato, a non-profit devoted to the restoration and valorisation of historical resources related to mining in the Guadiato region.



MARÍA DEL CARMEN GARCÍA

Company: Encasur

Title: Mining Engineer

Country: Spain

"The most important thing for me, serving at different positions in the industry, has been to defend the interests of my fellow mining engineers at a local, regional and national level, as well as the image of coal mining itself."

WOMEN IN MINING



"In addition to the integration of diversity within mining, the major challenges are reaching zero fatalities, zero environmental damage and delivery at a lower cost. To get there we need to take wise decisions with environmental liabilities, testing new technologies, exploring new products that offer greater health and safety benefits, and driving innovation."

ANGIE IVONNE CARO ASTORGA

Company: Antofagasta Minerals S.A.

Title: Sustainable Management Engineer

Country: Chile

Angie Caro is a champion for diversity for reasons close to her heart. "My son has Asperger's and every day I fight for him to be part of society and not be seen differently or excluded," she says. "Inclusion is the way to improve the world. Diversity and integration are advancing, but it's a slow process because you have to eradicate myths and beliefs that in the mining world are around every corner."

Those beliefs dogged Angie when she entered the mining industry at a particularly vulnerable time: she was five months pregnant and the first female hire amongst a team of 200 men. "Today there are more women in mining, but I remember the beginning, where we had to adapt. I remember the customs, the jokes. Everything had to evolve. It's a lot better now," she says.

Angie has dedicated her career to creating better working conditions, not just through inclusion but by ensuring all colleagues return home every day, safe and healthy, and by making the mining industry more sustainable for the next generation.

After moving to Australia from the UK in 2004, a job in the resources industry appealed to Kelly Carter for its exoticism. "The opportunity to work in an environment that felt so quintessentially Australian, the red dust and endless blue skies of the outback, was too good to miss," she recalls.

Dividing her time between Perth offices and operations around Australia, a big part of Kelly's job is blazing trails. In 2016, she was the first female in over 10 years, and the first lawyer, to present at the Australian Diggers and Dealers Mining Forum. Addressing operational performance, exploration strategy, safety and diversity, she sought to demonstrate the changing face of resources company leadership. It worked: in the two years since, the same forum has seen an increase in non-operational and female presenters.

But with "glacial" progress on diversity at senior levels, Kelly's next challenge will be to help drive the cultural shift that is required to underpin real change, both in organisations and in society as a whole.



KELLY CARTER

Company: Gold Fields Ltd

Title: Vice President, Legal and Compliance – Australasia

Country: Australia

"I am consistently inspired by those women who work so tirelessly in operational and technical fields in a climate that can be truly hostile to women in mining, and who have used that experience and their own progression to empower others. This generosity of spirit, of time and resources is unlike anything I have seen in any other industry."

WOMEN IN MINING



BELINA CHARLIE

Company: Sortex Mining Inc

Title: CEO & Director

Country: Guyana

"Two things I wish someone had told me when I was entering the industry: First, financial diversification is key to survival. To survive mining's downs, make smart investments during your 'up' seasons. And second, your voice and views are best amplified when bellowed from a unified group."

For Belina Charlie, an indigenous woman who has had few of the advantages – neither money, education nor privilege – that so many others take for granted, mining offered what she needed most: possibility. "Mining is one of the few industries where your educational background does not limit your professional growth," she says.

Belina has worked hard to give her son a better life than the one she had. While working at a guest house, she began a business in mining, taking time off work to go locate her claims. Six years ago, Belina was diagnosed with ovarian cancer. Chemotherapy wiped out her memory, leaving Belina scrambling to rebuild herself alongside her company.

Around this time, she was offered a lifeline by the International Women in Resources Mentorship Programme, which gave Belina her first international knowledge development experience. Mentorship not only equipped Belina with new skills, but offered her new perspective on her own life and boosted her motivation. It was the lift Belina needed to carry on: "Women's survival in mining means being strong – stronger than your situation."

Over her 20-plus years of experience in finance within the mining and utilities industries, Rebecca Charlton has held a variety of international finance and corporate roles. One of her most formative, though, was as a fish out of water: moving to Brazil, without speaking the language, to take on a senior executive position.

Rebecca suddenly found herself in a very male-dominated environment, with a vastly reduced ability to communicate. She faced the challenge head on, learning to speak Portuguese and adapting to a different culture. She integrated into the teams around her and worked hard to earn a place as an effective leader. "Sometimes you need to take those leaps of faith or to really push yourself, because some of your best experiences come from those opportunities," she says.

The experience shaped Rebecca's management style, teaching her to listen more and be more inclusive. It also showed her that diversity – in its full extent, not just applied to the inclusion of women – is at the core of successful problem solving, innovation and value creation.



REBECCA CHARLTON

Company: CMOC International

Title: Senior Vice President & Chief Financial Officer

Country: United States of America

"If you are looking around the table and all the faces look like you and the voices are saying similar things to you, then the best answer is unlikely to emerge. We are at our best when challenged by different experiences, different perspectives and different ideas – it is good for the individual and it is good for business."

WOMEN IN MINING

"Having started in the industry when no women had the chance to get hands-on experience, I have witnessed how diversity has become much better accepted. However, I find it interesting that women in non-technical roles are often more accepted at senior levels than those who began their career in traditional technical roles. They are perhaps still seen as somewhat threatening."



SANDRA CLOSE

Company: Surbiton Associates Pty Ltd

Title: Director

Country: Australia

Dr. Sandra Close is a true pioneer. She began her 52-year career at a time when women were not normally employed by companies as full-time field geologists – in fact, she was Australia's first. That determination to not be relegated to a second-class position powered Sandra through two more glass ceilings: she was the first senior woman professional in banking and the first senior woman executive in a major oil company.

In every hard-won advance, Sandra matched her tenacity and determination with skill and professionalism. From CRA (now Rio Tinto) to the Australian Resources Development Bank to Shell, she made her own way, carving a path for other women to follow. She was the first woman Honorary Fellow of the AusIMM, and a recipient of the Sir Willis Connolly Medal.

Today, Sandra runs her own company, Surbiton Associates, and is an expert on the gold industry. More than half a century from the day she embarked on her career, she still finds the resources industry utterly fascinating.

As a banker working on mining financings, Christine Coignard fell in love with the industry – one she describes as "Populated by highly colourful individuals, that allows us to discover the world in all its beauty and diversity."

In the late 1990s, Christine's work on mining financing deals led to a role with Norilsk Nickel, overseeing the mining giant's transition into a more modern company. "We had strong headwinds on all fronts, this was an extraordinary human and professional adventure," she recalls.

A new career direction was born, and in 2001, the same year she became a mother, Christine created Coignard & Haas GmbH to focus on strategy and business development mandates as well as corporate finance and project financing advice. For Christine, who has shifted industries and moved from roles in multi-national banking giants to her own company, the common thread is an abiding interest in the people around her – drawing inspiration from the optimism and resilience of geologists, the professionalism and humility of miners who understand and respect nature, and the resourcefulness and passion of metallurgists.



CHRISTINE COIGNARD

Company: Coignard & Haas GmbH

Title: Managing Director

Country: Germany

"Diversity remains in its infancy, but change is coming. I have seen how improving ergonomics to accommodate for more women working in a flagship plant led to higher automation, less physical strain and better safety conditions for all. The plant director, a woman, also reported a smoother working climate and better teamwork, both conducive to excellence. We will get there."

WOMEN IN MINING



LAURA CRISTOFFANINI

Company: Antofagasta Minerals S.A.

Title: Project Manager Consultant

Country: Chile

"Diversity has come slowly but it is here to stay. Now it's our turn to challenge younger people to overcome gender, cultural issues, creed and colour and to demonstrate that anyone can reach their own personal goals and ambitions."

Laura Cristoffanini has more than 35 years of project management experience in the construction and mining industries.

"Coming from the building construction world, mining projects represented a challenge in terms of learning about a new industry, but in terms of gender they offer a greater opportunity to defy paradigms," she says.

Laura has done that since arriving in Chile's historically heavily male-dominated mining sector. In 1995 she moved from Minmetal to Codelco, the Chilean state-owned copper mining company where she was posted to the Andina copper mine north-east of Santiago. Laura was the first woman to hold such a role, and counts the experience as one of the proudest moments of her career.

Joining Antofagasta Minerals, Chile's largest private company, in 2012, Laura has led major projects and left behind a legacy of success in an area where few women tread. "We only fear our own limits and my great inspiration has been to show others that we are equally capable to pursuing the same goals and challenges, and learning every day," says Laura.

Long before joining it, Robyn Dittrich admired the mining industry from afar, working in oil and gas and in financial services companies where she had miners as clients. She was fascinated by the way the industry forms such a core part of companies that are critical for the infrastructure growth and economic development of Asia. "When I visit countries like China today compared to 15 years ago, I see mining by-products everywhere, and feel a sense of satisfaction that the industry has helped to shape that country into the powerhouse it is today," Robyn says.

Now a part of the industry, Robyn is working to make it more inclusive to the women who follow. She has thrown her weight behind BHP's goal to achieve a gender balanced workforce by 2025. A recent win came when BHP asked suppliers to ensure packaging was within lifting limits for both men and women, giving women real career opportunities in warehousing and inventory environments. "Many women gave feedback that this changed their lives," said Robyn. "Initiatives like this continue to inspire me."



ROBYN DITTRICH

Company: BHP Ltd

Title: Global Head of Continuous Improvement – Marketing & Supply

Country: Singapore

"I sometimes have issues that are so big, messy, cross functional, cross regional, cross cultural, that I need help getting perspective. Over the years I have collected a group of talented, diverse people around me, who act as my 'Board of Directors' when I need help to think about a problem in a new way. I recommend this to everyone!"

WOMEN IN MINING


BELVAC



"Diversity is progressing but not as fast as it should. We need to be more open to broadening our view of what miners look like. Our biggest challenge will be attracting talent – hence the need to broaden the pool from which we recruit, and change our habits, recognising that unconscious biases have kept the industry so male dominated."

NOREEN DOYLE

Company: Newmont Mining Corporation

Title: Chair

Country: United States of America

Early in Noreen Doyle's banking career, she was assigned to the oil and gas and mining division. She found the natural resources business fascinating – complex, relying on mergers and acquisitions and leveraged financing, and tied to the political issues of where the resource exists. Add in the opportunity to see mining operations from Canada to Colorado, Uzbekistan to Suriname, and Noreen was hooked. "It was endlessly intriguing" she says.

Today, Noreen is Chair of one of the world's largest gold producers, Newmont Mining Corporation, having worked as an executive with some of the biggest names in the financial and resources industries.

She is also a powerful advocate for gender diversity. Noreen led a drive to increase diversity throughout Newmont – diversity of the board, management and employees – and she was thrilled to see Newmont win the National Association of Corporate Directors' first diversity award. "We have made diversity a strategic initiative, and we are pleased to see it recognised this way," she says.

WOMEN IN MINING

Jo-Anne Dudley's career as an underground mining career began out of financial necessity: in 1989, coming from a modest background, a degree in Mining Engineering offered the possibility of steady work and financial security. Newly allowed underground, Jo-Anne and a small cadre of female colleagues carved a path for Australian women into underground mining.

Tragedy struck in 1999, when Jo-Anne lost four colleagues in the Northparkes Airblast. Two of the dead miners were Jo-Anne's direct line managers, and both left young families behind. Devastated by the loss, expecting her first child and newly rattled underground, Jo-Anne considered a career change. Instead, she found a new purpose in the industry she loved: advocating for safety.

Nearly 20 years on, Jo-Anne has been a major driving force in radical improvements in safety in underground mining. In a career that has taken her through Africa, the US, Canada and Australia, working in copper, gold, uranium and coal, Jo-Anne is widely recognised for her deep technical analysis skills and her abiding commitment to ensuring all colleagues get home safely, every day.



JO-ANNE DUDLEY

Company: Rio Tinto Ltd, Oyu Tolgoi Mine

Title: Senior Manager Strategic Mine & Resources Planning

Country: Australia

"Many women are entering the industry, and they are vital for modernising the culture, but we suffer greater attrition than males. We need to keep those highly trained women in the industry and keep them developing both technically and as leaders. We need to challenge ourselves to ensure more women enter leadership ranks through better recruitment and retention strategies."



NICOLE DUNCAN

Company: South32 Ltd

Title: Chief People and Legal Officer, Company Secretary

Country: Australia

"A career in mining can be incredibly rewarding. There is no one route to success or one definition of success. In my experience, a winning combination is to be interested in what you do, be open to new opportunities and places and to learning new things (including learning from mistakes!), and to enjoy being part of a team."

Nicole Duncan counts joining South32 as a career highlight – ironically, one that came at an industry low point, during the 2014 commodity down cycle. Starting as Chief Legal Officer, Nicole quickly distinguished herself as a person with enormous capacity to grow and lead, adding two more hats to her South32 portfolio: Company Secretary and Chief People Officer.

For Nicole, who has held senior roles at BHP and various legal roles in Australia, the US and the Netherlands, part of the South32 fit is cultural. "We have incredibly talented and resilient women who overcome all kinds of obstacles to perform in their roles," she explains. "I am very happy to do what I can to contribute to the collective effort."

Nicole was inspired to join the industry by her father, an economist who worked on policy for international trade and emerging economies. She believes mining can offer a platform for equitable development to local and state communities. As a champion of workplace diversity, Nicole is committed to the values of equity, equality and fairness. For her, it's simply good business.

Lana Eagle is a change agent working in an area in desperate need of transformation: the engagement of Canada's indigenous communities.

A member of the Whitecap Dakota First Nation in Saskatchewan, Lana advises companies on how to better work with indigenous communities. Coming to mining by way of banking, economic development and wealth management, she found more than a career, but a purpose. "I realised what an incredible opportunity there was to be a change agent for indigenous people. And with the advent of diversity and inclusion, there is even more work to do," Lana says.

That work can have a lasting, positive impact on entire communities. In one example, Lana recalls collecting feedback from participants in a training and employment programme designed to include more indigenous people in the mining industry. Her heart was moved hearing people describe the pride they felt in moving from living in poverty to making a decent wage in order to provide for family members. "For local people like indigenous communities, training and jobs can be life changing," Lana says.



LANA EAGLE

Company: Lana Eagle

Title: Senior Advisor & Consultant

Country: Canada

"Diversity is likely easier to achieve than its counterpart, inclusion. In my mind, inclusion happens when I feel I belong. And not to just any environment, but to a healthy and positive work environment. We all have a role to play in making sure everyone feels like they belong and until that happens there is lots of work to do."



"The industry's biggest challenge is its social license to operate. Companies have to walk the talk for countries and communities to welcome us, if we want our operations to be profitable, and if we want the best new talent. Working as partners with local and global communities, I know the industry can do it."

CLAIRE ESBENSHADE

Company: ArcelorMittal

Title: Manager Corporate Responsibility, Sustainable Development and Government Relations

Country: United Kingdom

For Claire Esbenshade, an environmental science and economics graduate, choosing a career in mining meant not having to choose between the fields she loved.

"There is every sustainable development-related topic in the mining industry", says Claire, who has surveyed chimpanzees in the Congo, written policy briefs on tax, and presented on the role of business in emergency response. She was a founding member of the Ebola Private Sector Mobilisation Group in 2014, and spent years in west and central Africa building relationships between companies and universities, NGOs and research organisations.

One of Claire's proudest moments was being recognised by Kew Gardens for supporting ground-breaking research in Africa. Today, she represents ArcelorMittal in the Development Partner Institute and the Extractive Industry Transparency Initiative. After working in the resources industry on four continents, Claire is convinced that mining can be an agent for change: an industry that creates 10 indirect jobs for every direct job. In her current role, covering issues from climate change to community relations, Claire is driving that change.

WOMEN IN MINING

Catharine Farrow is a geoscientist who has worked throughout the industry, from research through exploration, operations and now as a mining executive. She leads her own consulting company, serves as a director of Franco-Nevada Corporation, chairs several boards and has been an adjunct professor at Laurentian University since 1995.

Catharine fell in love with minerals at age 11, when her grandfather gifted her an Estwing hammer and, in her words, "I was hooked." Other interests came and went, she says, "But the rocks always won." Years in exploration followed, offering Catharine her best moments in mining – a tie, she says, between the realisation that the team had made a significant new discovery (which eventually became a mine), and the realisation that the team had successfully built a mine where nobody else ever had.

It's no surprise that Catharine's advice for women at the start of their careers is to seize that sort of opportunity and adventure. "Get field, project or operational experience and stay out of the corporate office while you are young," she says.



CATHARINE FARROW

Company: FarExGeoMine Ltd

Title: President

Country: Canada

"Mining can attract new people by making the industry more attractive as an employer to women and indigenous people, both of whom are under-represented. However, how we address the retirement and demographic gaps in the experienced workforce is concerning. We must ensure stronger training and mentorship programmes at all levels. The fear is that we are reacting too late."



JOHANNA FIPKE

Company: Fasken Martineau DuMoulin LLP

Title: Partner

Country: Canada

"If I am ever feeling discouraged or defeated, I think about all of the women and men who challenged the status quo and who made changes to lay the path so that I could be given the career opportunities I have today. I think of sacrifices that were made and remind myself that there is still more to achieve for women. And so this must change for the good of all who come after us."

Joanna Fipke's exposure to mining began in childhood, when she recalls being fascinated by both the core samples that sat on her dining room table and the determination that the industry appeared to cultivate in those around her. Despite this, it took until the start of her legal career for Joanna to realise her future lay in mining.

From 2005, Johanna focussed her practice primarily within the mining industry. At Fasken Martineau DuMoulin LLP, a law firm with an international recognition in mining, Johanna takes a lead advisory role in multi-million and billion dollar transactions in the resources industry.

Joanna is open about the challenges of balancing a demanding career with a family, and about the work of fighting for a seat at a male-dominated table. This honesty and willingness to share lessons learnt with the next generation have made her a valued mentor and member of Fasken's student committee. As she puts it, "My greatest success will be the day when the people that I mentor and champion have success that far outweighs mine."

WOMEN IN MINING

Resa Furey entered the mining industry with a marketing and communications background. She is a sustainability champion who has distinguished herself in the area of water management.

Resa is an organiser and a driving force behind Mine Water Solutions, a conference devoted to improving the sustainable use of water at mines. She has led an initiative to benchmark the global state of alternative tailing disposal practices and the water savings that result from these methods. She has also published widely on water management, reuse and chemical mass balance in mining.

A gifted communicator with a number of languages to draw from, Resa acts as an ambassador both within the industry and outside of mining. She regularly reaches out to young women and encourages them to pursue an education, embrace STEM and seek their futures in the mining industry.

"I'm inspired by women and men who leverage their privilege to make opportunities available for women and people with diverse backgrounds," she says. "Doing this shows that we believe an empowered future for all women is possible."



RESA FUREY

Company: Stantec

Title: Director of Marketing

Country: United States of America

"The industry has made progress in terms of diversity. Moving towards parity – in pay and in numbers – is the industry's next challenge. Another is investing for the long-term. If every company took a big picture perspective and always invested in the long-term success of their assets – their people, mines and the environment – it would transform the industry."

"I'm proud to be part of a company with over 50% female representation on our board. However, if you look at Australia's top ASX100 companies, there are more CEOs with the name 'Andrew' than there are women CEOs. Corporate Australia needs to address this by focusing on leadership development, retaining female talent and ensuring more balance and flexibility in the workplace."



ELIZABETH GAINES

Company: Fortescue Metals Group Ltd

Title: Chief Executive Officer

Country: Australia

Elizabeth Gaines has challenged gender inclusion in the space where biases against women are toughest to shift: senior leadership.

Becoming CEO of Fortescue Metals Group in February 2018, Elizabeth was the first female chief executive of a major Australian mining company. It wasn't her first 'first' with Fortescue, either: Elizabeth was Fortescue's first female director when she joined the board in 2013. As so many trailblazers hope will happen in their wake, Elizabeth's appointment paved the way for further change. By November 2016, not only did Fortescue's board have a majority of female directors, but it was the first ASX Top 20 Company with five female board members.

Fortescue is known for its practical approach to supporting women in the workplace, with flexible working arrangements, job share and an on-site crèche in its Perth office. For Elizabeth, offering a more inclusive workplace is just a starting point. She also promotes these solutions to the broader community by hosting workshops with Fortescue's contractors to share ideas on how to make workplaces more supportive for women.

A big part of who Allison Golsby is today, both personally and professionally, was shaped by the experience of being trapped in the Northparkes Airblast mine accident. While waiting to be rescued, Allison swore to herself that if she made it out she would promote women in industry, stand up for herself, be honourable to everyone, give to community and buy a motorbike. "I am proud to say I have stood by these promises," she says.

Today, Allison is a director of several unlisted financial management companies, CEO of a boutique mining consultancy, and is active in various industry bodies. She takes on community projects, like raising $100,000 for indigenous training resources and developing community-based mental health support programmes.

Allison is also focused on driving diversity. She undertook a study looking at the link between diversity and company performance and found that amongst businesses that are high on the diversity indexes, the top quartile has 34% more profit than the bottom quartile. For Allison, the takeaway is obvious: "Diversity makes business sense."



ALLISON GOLSBY

Company: ConsultMine Pty Ltd

Title: CEO

Country: Australia

"I enjoy working around machinery. My father sold our farm so I didn't have to: he said I needed to wear a skirt, make a chocolate cake, be a secretary and get married. I left home, joined mining and travelled the world. I became an engineer to solve problems from the inside after being trapped underground in the Northparkes Airblast."



DARIA GONCHAROVA

Company: Polymetal International

Title: Chief Sustainability Officer

Country: Russia

"A transformation is needed in the approach to government and community relationships. If issues arise, it means the company has failed to maintain the social licence to operate. This is not a legal concept: it is about human relationships. We need to move away from paper and toward substance – doing what is right and not just what is legal."

Daria Goncharova is from what she calls a "mining dynasty," the daughter of mining engineers and the granddaughter of a digger operator, a girl who grew up memorising the names of stones on cold Siberian nights.

Language was Daria's way into international work, and she spent her early years translating documents for senior leadership. Once, while translating the Russian-language biography of a female board member into English, Daria had a moment of clarity: here was an "extremely intelligent, educated and determined" woman – one with two Master's degrees and a helicopter pilot's licence – at the helm of a major company. Daria was profoundly inspired. "Ever since I read that bio, I've been focused on developing my leadership skills," she says.

The focus has paid off. Daria moved from translation into business development, and in 2010 joined Polymetal in the corporate finance and investor relations team – a role that has allowed her to realise her early-career dreams of international travel and a meaningful role in the industry she loves.

Gabriela Grijalva is a late arrival to mining, a 50-year-old woman who started her career at age 37 in order to support her three daughters.

The early days were tough, working on a Pan-American Silver project with exclusively male leadership and the sense of being an outsider. Two mentors offered support, and subsequent moves to Silver Standard and then Couer showed Gabriela what the industry could offer – both for her and her daughters, who have all received tertiary education.

At Argonaut Gold since 2014, Gabriela feels fortunate to have women in company management.

She's a long way from the days when "There were 15 men around the table saying it wasn't possible for me to handle purchasing and warehouse, that I didn't have the knowledge to do it. I was afraid but that made me work harder and prove them wrong," she recalls.

Like many women who choose mining, Gabriela was driven by financial reasons. Thirteen years on, she has a different motivation for going to work every day: "I stay because I fell in love with the mining world."



GABRIELA GRIJALVA

Company: Argonaut Gold

Title: Purchasing Director

Country: Mexico

"Mining's challenge is to change the concept people have of mining, that we are bad for the environment and create sickness around the mine and in workers. To change that, we as miners need to let people know how we work and what we do for safety, security and environmental care."

WOMEN IN MINING



"I've worked on projects ranging from a private drift mine in the South Wales coalfield where they were still using ponies to pull the trams out of the mine, to huge mines that have operated for decades in the most challenging of physical environments. It was on sites like these that I realised the common root of 'engineer' and 'ingenuity'."

KATE HARCOURT

Company: Self-employed

Title: Independent ESG Advisor

Country: United Kingdom

For anyone wondering about alternatives to corporate life in the mining industry, Kate Harcourt's career provides some inspiration.

An environmental scientist with a focus on pollution, Kate started her career at SRK (UK), where she was the first female professional employee and the first environmental professional in the UK practice. In 1998, newly a mother and seeking a different balance, Kate started working for herself.

Twenty years later, Kate has built a name for herself as a person who understands the interrelationships between environmental, social, economic and technical aspects of a project and working out how these can be managed. Her clients include IFC (World Bank Group), the Responsible Jewellery Council, and mining corporations in advanced stage exploration projects, where Kate typically acts as an advisor to owner's teams. Kate lectured on environmental management at Cardiff University from 1992 to 2004, and she sits on the boards of three mining companies. The common thread in all of this is a drive to encourage companies to make environmental and social considerations in the way they work.

WOMEN IN MINING

One of Wendy Hutchinson's early mentors advised her that it was best to find natural leaders and surround them with smart people – and better still if those smart people don't think the same way you do.

This insight has informed Wendy's career, a 30-year journey through industrial site development, environmental management, and external affairs. Wendy has elevated others' skills and strengths without fear that this might diminish her own. A fond memory calls this to mind, when Wendy returned to a coal mine for a visit a few years after moving to another facility. "The first person to run to greet me with a hug was the cleaning lady and right behind her, a young engineer. I was humbled that I had been appreciated by both these women who had very different roles in the organisation," she recalls.

Today, Wendy's focus is on leading the way for the industry to work in a more environmentally sustainable way. She is proud to have overseen the compliance of over 12,000 acres of reclaimed land in her current role.



WENDY HUTCHINSON

Company: Millennium Bulk Terminals

Title: Senior Vice President of External Affairs

Country: United States of America

"I had negative stereotypes about the reclamation of land after mining, but I wanted to make a difference and I think someone inside an organisation can do more than someone outside, pounding on the door. Once inside, I found a company of people with the same goal – to restore lands to a condition that would make their children proud."





TZVET ILARIONOVA

Company: Gold Fields Ltd

Title: Vice President and Group Head of Finance

Country: South Africa

"To anyone thinking about a career in this industry, I say jump in and do not look back. Mining is not one dimensional and gives exposure to various areas of business, accounting, tax, corporate finance, valuation and technical fields. There are no boundaries if you really want to achieve something."

Tzvet Ilarionova was first exposed to gold mining at the start of her career, while doing her articles at PricewaterhouseCoopers. "Due to its dynamic fluidity and ever changing landscape coupled with physical, social and environmental challenges, mining made sure I never looked back," she says.

After qualifying as a chartered accountant, Tzvet gathered experience in various roles at Gold Fields, taking part in transactions and building her knowledge of gold mining. As Vice President and Group Head of Finance, Tzvet is responsible for group reporting, accounting function and compliance with accounting standards. She is positive on changes occurring in the sector and industry, but believes complacency – thinking that the gold sector might bypass some of the challenges affecting other resources sectors – is the real risk.

"The social and environmental challenges are growing as in any other industry. Looking specifically to gold mining, we need to embrace innovation and technology to ensure our survival in a finite resource industry," she says.

Kesego Jarona joined Botswana's diamond mining industry at a time when the mine workforce was so overwhelmingly male that the only women there were teachers, HR or finance staff. Still, Kesego pushed forward, claiming her place in the mine as an apprentice, and against significant odds, became a fully-fledged artisan.

Thirteen years after qualifying, Kesego manages one of Debswana's largest projects. She is widely respected for her skill and professionalism, and for her perseverance in carving her own path through Botswana's diamond industry.

Kesego, who recalls being inspired by female miners as a child growing up in the mining town of Selebi Phikwe, has come a long way from the apprentice auto electrician fresh out of school who was anxious about pulling 24-hour solo shifts and having to solve defects on her own. These days, she is better known for designing an initiative to prolong tyre life and save costs – an initiative, she is proud to note, that has saved Debswana money for two years running.



KESEGO JARONA

Company: Debswana Diamond mine

Title: Operational Readiness Manager

Country: Botswana

"We need to give more women platforms to shadow senior managers. This will help in our growth. My advice to new entrants to the industry is that it is not an easy road, but you need to persevere. Do not be afraid to make mistakes, be accountable, and, lastly, network with other women in the industry for growth."

WOMEN IN MINING



"We need to encourage schools, training organisations and universities to understand the impact digital disruption and automation will have on the resources industry and ensure we are prepared. STEM skills are declining in our student population, particularly with girls and most often in late high school when peer pressure and broader community influences drive students towards non-STEM subjects."

MERYL JONES

Company: St Barbara Ltd

Title: Principal Business Development

Country: Australia

Meryl Jones is a 30-year veteran of the resources industry whose career history includes mining, exploration, land management, resource analysis, business development, and, closest to her heart, advocacy and mentoring.

At St Barbara, Meryl advises on investment strategy and business development from early exploration to advanced stage resources projects. Her skills and experience run the length of the mining value chain, with an emphasis on high-level technical and financial analysis and due diligence, exploration and development strategy, and business sustainability.

Meryl is also the founder and patron of Get Into Resources Inc, a volunteer-led organisation that promotes the industry to secondary school students. Taking this idea from, in her words, "thought-bubble" to "functional resources industry talent pipeline for the future" was a peak achievement in a career defined by enthusiasm for the work and a genuine desire to share that with other people – especially young women entering the industry. Meryl has a particular interest in the attraction, retention and advancement of women in the sector and works to inspire change through leadership and mentoring.

As one of a handful of women at the helm of an Australian mining engineering company, and a multi-award winning leader at that, Maria Joyce has seen the industry from just about every angle.

This perspective has given Maria an insight many company heads lack: that diversity isn't a risk or a threat, but something that truly strengthens businesses. In her words, "Creating the right environments and cultures is vital to embrace diversity, but also to ensure that it is sustainable."

For Maria, this translates to using her position to transform the future of work for women and other marginalised groups. She is proud to have played a part in making MEC Mining a WORK180-endorsed employer for women – a status that involves meeting criteria on paid parental leave, pay equity and flexible working.

Maria is a great believer in the power of networks and sponsors. She is an active mentor and has served as Women in Mining and Resources Queensland (WIMARQ) Committee Chair for the past year and a half.



MARIA JOYCE

Company: MEC Mining Group Pty Ltd

Title: General Manager

Country: Australia

"For me, it's about how I can serve the mining and resources community – how I can make the industry and the world a better place for future generations. I want my sons to grow up knowing their mum made an impact and used her passion and career success as platforms to help others. That's what leadership is all about."

WOMEN IN MINING



MADINA KAPAROVA

Company: KAZ Minerals PLC

Title: Group Procurement Director

Country: Kazakhstan

"I think diversity in the copper industry is developing in a positive direction. Today, as an example of our company and our country, we see no restrictions at any level in the mining industry for anyone, whether it is gender, age, nationality or colour. In a mine or a factory, one must work in unity; all have the same opportunities."

Madina Kaparova was born in a mining town to a mining family. A job in resources was the obvious choice, but over 20 years, Madina has built a career that is all her own – and made an outsized impact not just on her company, but on Kazakhstan's mining industry.

Starting in procurement, Madina advanced her career through high performance and a hunger for learning: she earned an MBA and a MSc in Economics while working, and authored 15 scientific publications along the way. Known for her open-minded and empathetic approach, Madina is a celebrated manager, mentor and corporate ambassador for KAZ Minerals.

One incident paints a picture of Madina's hands-on approach. Under pressure to get an urgent shipment of copper products to an key customer on a tight schedule, her exhausted workers were struggling to improve the condition of the cathodes in order to ship. Spotting an opportunity, Madina headed for the workshop, grabbed tools and protective clothing and joined in the work. Morale lifted, production increased, and the team met the deadline.

Leanne Kemp is the Founder and CEO of Everledger, a start-up that works to drive transparency and trust along global supply chains using emerging technology.

Something of a compulsive business founder – she previously founded three Australian start-ups and led various solutions to streamline inventory and supply chain operations – Leanne is an award-winning business head who is recognised for playing a leadership role in technology. She is an appointed member of the World Economic Forum's Global Blockchain Business Council and a Co-Chair for the World Trade Board's Sustainable Trade Action Group. She is also on the IBM Blockchain Platform Board of Advisors.

For Leanne, the potential of emerging technologies to transform industry gives mining companies the opportunity to become leading partners in achieving global development goals through the application of transformative technologies like blockchain, robotics, artificial intelligence and machine learning. For this reason, Leanne is passionate about being a catalyst for change through technology pledges and initiatives that strive to protect biodiversity, respect human rights, and contribute to the sustainable development of host countries.



LEANNE KEMP

Company: Everledger

Title: Founder and CEO

Country: United Kingdom

"As the mining industry adopts digital technology on an ever larger scale, the risk of cyber-attacks becomes exponentially greater too. The industry is using digital solutions to achieve greater productivity and higher margins, but if cyber-security is not addressed these gains could be wiped out in an instant."

WOMEN IN MINING



"I fell in love with the excitement of mineral exploration in my first work placement at BHP whilst at university. The thrill of waiting as the drill rig neared the target depth on my first field trip caught my passion and my imagination and I knew it was the career for me."

TRACEY KERR

Company: Anglo American PLC

Title: Group Head of Safety and Sustainable Development

Country: United Kingdom

Tracey Kerr is a veteran mineral explorer who has built her career on firsts.

Tracey was the first person in her family to attend university, and then as a young geophysicist was frequently the first woman to visit a site. When Tracey started a family, she pushed through boundaries there, too, showing that it was possible to have children and remain in a frontline role. And she has done so, exploring for minerals and metals in Russia, Chile, Papua New Guinea, Argentina, Brazil, Canada, Chile, Colombia, Peru and the US, leading culturally diverse teams of more than 250 people.

Over the course of her career, Tracey credits some key managers with offering the support that made a difference: a geochemist at BHP who had children but still worked in exploration; a boss who offered Tracey a promotion whilst she was on maternity leave; colleagues who took on additional travel while Tracey was pregnant. "I think the key is to think about what is possible, rather than what is not possible," says Tracey.

Racquel Kolkert's mining career has been shaped by teamwork, particularly in the early years – an experience not all women are fortunate enough to share.

Joining the industry in the late 1990s in Kambalda, Western Australia, Racquel contended with low commodity prices and little to no interest in exploration, learning first-hand the need for resilience in a cyclical field. But the young mine geologist also experienced a powerful camaraderie, working on a team that was, astonishingly, almost entirely female.

"We supported each other and this made us stronger as individuals and as a team," Racquel says. "I gained a lot of confidence and saw how effectively teams could work together – men and women."

Building a career on such a strong foundation, Racquel has felt more able to push past her comfort zone. She gathered "irreplaceable" field and operational experience, working on projects in in Australia, Indonesia, Fiji, Papua New Guinea, USA, Ghana, Mauritania, Cote d'Ivoire, Brazil and Chile. In 2014, Racquel moved to Canada with her family to further her skills as a resource geologist and as a leader.



RACQUEL KOLKERT

Company: Kinross Gold Corporation

Title: Director – Resource & Mine Geology

Country: Canada

"My first vacation job was at Hellyer underground lead-zinc mine on Tasmania's West Coast, going underground with the truckies (truck drivers). The most amazing thing was how I was included on the team. It didn't matter that I was young and female. Even the 'scariest' underground miners took me under their wings. I never felt like I was on my own."

WOMEN IN MINING



SALLY-ANNE LAYMAN

Company: Pilbara Minerals Ltd

Title: Non-Executive Director

Country: Australia

"Those who do well in this industry take chances – they apply for intimidating positions, they look at assets through a different lens and they're prepared to sacrifice pay for experience. And network! Not only will most opportunities come that way, but I can't stress how many times I've not known the answer to something, but someone in my network does."

Growing up on a farm, Sally-Anne Layman learned self-reliance and problem solving – skills that have shaped a diverse career in mining with 24 years of cross-commodity experience across six continents and over 20 countries.

Although the majority of Sally-Anne's current work is in a finance and advisory capacity, she is an engineer who counts as one of her most exciting moments the start of her three months on an airleg, then a necessity for a mine manager's ticket. Drawn to mining for the job prospects, pay and travel, Sally-Anne found an unexpected gift in her colleagues: the miners who shared practical knowledge during her underground time and shift-bossing, the engineers and accountants who taught her what they knew, the investment bankers who took on a "young, green miner" and gave her a chance.

That chance led Sally-Anne to a senior management role, a seat on the board, and continued learning in a field she loves. Passionate about embracing cognitive diversity, Sally-Anne is committed to improving the industry for those who follow – men and women of all backgrounds, experiences and ethnicities.

Andrea C. Lemus is an independent legal consultant with over 12 years experience on regulatory, environmental and commercial matters with a special emphasis on mineral law and environmental legal issues.

Andrea currently leads an initiative that focuses on women's empowerment in the mining industry in Colombia. "I am inspired by the persistence, constancy and dedication that has enabled these women to carve out successful paths in an industry that is essentially male-dominated," she says.

For Andrea, the best part of the job is creating positive change for Colombians. Previously, while working on an emerald mining project, Andrea set and implemented the corporate policies of one of the largest emerald mining multinationals working in Colombia. "This allowed me to develop a framework for building strong community relationships with one of the richest traditional mining communities in the country, generating job opportunities and providing a steady source of income to nearly 100 low-income families," Andrea says.



ANDREA C. LEMUS

Company: Inter-American Development Bank

Title: Senior Consultant – Extractive and Energy Sector

Country: Colombia

"I strongly believe that my country needs individuals with the right tools and expertise to help drive the effective and responsible management of the mining sector in Colombia, which can bring an unparalleled level of social and economic development to the country. That is why I will stay for ever in this industry. Mining is my passion!"

WOMEN IN MINING



"There are a few organisations that are truly enlightened and they are building new foundations around diversity and inclusion. They are the organisations that are going to be successful. They have a gravitational pull for women in mining. I feel the pull myself and I know it is going to be irresistible in the years to come."

CARMEN LETTON

Company: Anglo American PLC

Title: Head of RDP and LoAP

Country: Australia

Carmen Letton's enthusiasm for her work is infectious. "I truly love being a mining engineer and mineral economist," she says. "The challenges continuously present with new form, so I'm always learning."

With a background spanning three decades on five continents, including technical, operational, management, executive, corporate and consulting roles at small, medium and large mines, throughout the mining life cycle, there have been plenty of challenges.

One that stands out was Carmen's relocation to Papua New Guinea for a job at Lihir Gold Mine, one of the most technically challenging mining environments in the world. "The act of heading up there was a train-smash of terror and anticipation," she recalls. "I remember the moment with such clarity, staring across the seats of our two children on the plane, into the eyes of my husband, who was equally terrified. We just kept putting one foot in front of the other."

That determination, combined with love for what she does, has worked – both in Papua New Guinea, where it led to a remarkable six years mentoring local miners, and throughout Carmen's career.

Dr. Oy Leuangthong is a Principal Geostatistician with SRK Consulting (Canada) Inc. with over 15 years of experience in geostatistics for resource characterisation and uncertainty assessment. She consults on mining and petroleum projects and teaches geostatistics to engineers and geologists from national and multinational companies in North and South America and Africa.

Oy's career reflects the outcome of the old maxim of doing what you love – or in her case, what intrigues you. For Oy, that was the inherent uncertainties faced in the subsurface. "The behaviour of man-made materials is fairly predictable, but how rocks and soils behave is challenging to predict, changing from location to location," she says.

Discovering geostatistics during her graduate studies, Oy believes the field can bring certainty into an industry that needs it. "There's a lot to be gained by the industry if more geostatistics could be used for 3D resource modelling. Uncertainty is inherent in what we model and there are ways to predict it and plan for it. We just need to be open to new ideas and technology," she says.



OY LEUANGTHONG

Company: SRK Consulting (Canada) Inc

Title: Principal Consultant (Geostatistics)

Country: Canada

"I've never really considered being a woman in a male-dominated industry as a real impediment in my career. I guess I've benefited from all the women who came before me and paved the way. Most of my mentors have been male, all of them passionate about what they do. They've never treated me any different than my male counterparts."

WOMEN IN MINING





ELIF LEVESQUE

Company: Osisko Gold Royalties Ltd

Title: Chief Financial Officer

Country: Canada

"The industry's top challenges are finding new economically feasible resources, social acceptability and access to capital. This past year, access to capital seems to be the major focus. Canada remains a top receiver of funds thanks to well-functioning capital markets, efficient securities regulation and the government's supportive financing regime. There is an important role to play for companies as well."

Newly arrived in Quebec as a foreigner Anglophone in a Francophone environment, Elif Levesque fell into the industry by chance when an HR manager misunderstood her work experience at Iron Mountain and offered her an interview with a mining company.

Elif seized the opportunity and fell in love with the industry. She loved the travel and seeing mining's positive impact on communities. She rarely felt like an outsider. "I was already considered a minority at so many different levels, I think it did not even occur to me that I was a female in a male-dominated industry," she recalls.

Elif's proudest experience in mining was also her toughest. After joining Osisko Mining Corporation, the company experienced a hostile takeover bid, followed by months of exhausting work to do better for shareholders. The "phenomenal" outcome was the creation of Osisko Gold Royalties, which, four years on, has tripled its market capitalisation to $1.5 billion, is dual listed on the Toronto and New York Stock Exchange, and has the best growth profile among its peers.

As a non-executive director on the boards of three resources companies and the Melbourne Business School, Xiaoling Liu draws on decades of industry knowledge to contribute to the effective governance of these companies.

For Xiaoling, this chapter is a capstone on a career that took her from poor beginnings in a remote town in China, to the UK for higher education and to learn English, and to the Rio Tinto Group, where she spent 26 years working around the world. The idea of working in a male-dominated industry did not bother her, she recalls: "If anything, it added another layer of excitement and opportunity for me to demonstrate what I could do."

She could do – and did – plenty. From a first job as a senior research scientist through various operational and technical roles, then into senior management and the executive suite, Xiaoling overcame challenges related to language, culture and gender, becoming one of the most respected and inspirational female leaders in the mining industry. In 2017, Xiaoling was made a Fellow of the Australian Academy of Technological Sciences and Engineering.



XIAOLING LIU

Company: Newcrest Mining Ltd, South32 Ltd, Iluka Resources Ltd

Title: Company Director

Country: Australia

"Know your strength and needs, and focus on developing your skill set by doing the best in your current job. Being a woman should not prevent you from delivering outstanding results. Your track record is your best defence to any gender bias. By demonstrating that you can do your job well, you make it easier for women coming after you."

WOMEN IN MINING



"This sector is under my skin. Two challenges are on my way and I must at least solve one of them before I think of leaving mining. I also have the opportunity to witness the development of this industry in my country: the sector is less than 10 years old, so it's extremely exciting to bring my stone to the foundation."

CHRISTINE LOGBO-KOSSI

Company: Chamber of Mines Cote d'Ivoire

Title: Executive Director

Country: Côte d'Ivoire

Christine Logbo-Kossi has been with the Chamber of Mines of Côte d'Ivoire since 2011, where she works to give a voice to Côte d'Ivoire's private mining sector.

Christine's background is in communication and network-building. She was co-opted into the mining sector based on her work in advertising, in hopes that she could use these skills to develop strong relationships between mining actors, manage the industry's engagements with stakeholders including the government and civil society, and engage on issues including supply chain, security and sustainability.

Not intimidated by the broad portfolio, Christine leapt at the challenge and put her communication, organisation and consensus-building skills to the test. One of her most challenging moments, delivering a speech in English to an audience of mining experts, was also an opportunity for advancement: Christine presented her ideas with such passion that she was invited to join the board of an international programme.

Three years after joining the Chamber of Mines of Côte d'Ivoire, Christine was promoted to Director, making her the first woman to hold the role in West Africa.

WOMEN IN MINING

Susan Lomas is a geologist who has worked in Timmins and Yellowknife in Canada, as well as in Mexico, Ghana and Venezuela. She founded Lions Gate Geological Consulting Inc. in 2006 and has worked on projects around the globe.

When the #metoo movement exploded in 2017, Susan reflected on her own experiences from 30 years in mining – experiences that include sexual harassment, threats, intimidation and discrimination. She had always persisted, finding pathways through obstacles and pushing forward with her career.

But as the conversation about men and women, power and violence gained traction, Susan felt that a related conversation needed to start in the mining industry. Moved to action by the story of Pinky Mosiane, a South African miner who was assaulted and murdered on the job, Susan founded the Me Too Mining Association in February 2018.

"Me Too Mining wants to let all women and men in mining who have been impacted by sexual violence and harassment know, they are not alone and that we stand in solidarity with them," she says.



SUSAN LOMAS

Company: Me Too Mining Association and Lions Gate Geological Consulting Inc

Title: President

Country: Canada

"I was inspired to enter mining through my passion for geology and the geological sleuthing necessary to locate and define precious metal deposits. This was always my focus. The negative cultures and behaviours that sometimes result from mining being male-dominated impacted me deeply, but I never allowed any of it to stop me."



GABRIELA LOVE

Company: Newcrest Mining Ltd

Title: Manager Performance – Telfer Operations

Country: Australia

"The challenge for our industry will be the ability to attract the right candidates from other industries such as gaming, software design, digital media, finance and social technologies. To be in the race, we must reframe and remarket our industry to the wider community. Showcasing our industry as high-tech and relevant could challenge perceptions that it is drab and dirty."

Gabriela Love was one of the first 10 female mining engineers to graduate in Australia. She started her career with stints as a haul truck driver on shift and a shotfirer on blast crews in Kalgoorlie and Mt Magnet in Western Australia, before moving into technical and operational roles leading teams in strategic mine planning, mining studies and contract management in gold, copper and coal.

Gabriela's parents emigrated from Chile to Australia in the early seventies to give her a better life. Her mother encouraged Gabriela to pursue a university degree "no matter how unconventional" – encouragement that led Gabriela to study mining engineering. A summer job at a coal mine where she saw a dragline and large scale blasting in action clinched it: "After that, I was hooked!"

Gabriela's unconventional path was shaken when four colleagues were killed in an underground mine collapse. As a trained rescue worker, it was Gabriela's duty to assist in recovery efforts. "No amount of training and participation in competitions can prepare you for that," she says.

For Nolundi Luthuli, a trilingual (English, isiZulu and isiXhosa) mentor, motivational speaker and published author, disability may have shaped her career, but it has hardly limited it.

Nolundi is visually impaired and the recipient of a simultaneous pancreas and kidney transplant. She began her career working with students as a Special Needs Officer and went on to work as an advocate, fundraiser and motivational speaker – talking to students about health issues and financial skills, addressing disability and inclusion on national radio, and organising events and support for disabled students.

Nolundi moved into resources accidentally, when a recruiter at an agency serving disabled people introduced her to ArcelorMittal. Despite this, she believes she was born for this industry and this role – working with a global minerals giant to balance profits with care for the community and environment.

"Living in an age where we have limited resources, I have the privilege of having access to technology and information that can help me to do my work efficiently and creatively," she says. "This is for me an interesting and exciting challenge."



NOLUNDI LUTHULI

Company: ArcelorMittal South Africa

Title: Graduate Trainee CSR

Country: South Africa

"A woman entering this industry must be open-minded, tough and courageous. She must not be afraid to speak her truth and let her voice be heard. Listening to other people's views will help her learn faster and better collaborate with team members in order to find innovative ways of driving this industry into a new trajectory."

WOMEN IN MINING



"Recognising and embracing the new generation of female executives in the industry will be a challenge for the traditional South African mining industry in the next two to five years. There is an abundance of female talent ready and able to take over and lead the industry to new heights. The appropriate exposure, coaching and mentorship will greatly assist."

THABILE MAKGALA

Company: Implats Platinum Holdings Limited

Title: Executive: Mining

Country: South Africa

Thabile Makgala is a trailblazer who has made mining industry history not once, but twice.

The most meaningful moment in Thabile's career was becoming the first female learner official at a deep level gold mine in South Africa (Gold Fields Kloof and Driefontein division, now Sibanye Gold). "I believe it was a defining moment for the organisation, but also a demonstration to women in the industry that anything in life is possible as long as you believe it can be accomplished," she says.

Thabile soon broke more new ground as first female head of technical services for the Gold Fields South African Region. A mentor to young female graduates and a regular speaker on the potential of women in South Africa, she believes the legislative frameworks designed to get more women into the industry are a good start. "Deliberate action is still required to integrate women in the workplace. Men and women should be provided with equal opportunities, and equal treatment in an endeavour to rectify historical imbalances and propel the industry forward," she says.

For veteran accountant Denise McComish, who followed a passion for numbers into a lifelong career with KPMG, mining was always the perfect fit. "I've loved mining since I first kicked the tyres in gold mines in Western Australia thirty-plus years ago as a young auditor," she says.

Since then, Denise has worked both as an external auditor and adviser to the resources industry through capital raisings and acquisitions, contributing to the creation of investment platforms for future growth. In Western Australia, where mining is the life blood of the economy, this has given Denise a front-row seat on the positive impact this industry can have on developing communities by providing employment and social contributions.

Today, as KPMG's national mining leader, Denise draws on decades of experience to help clients stay abreast of developments in the resources sector. She visits mining sites as often as she can, still transfixed by the complex interrelationships between the physical, environmental and technical challenges this industry presents, and the constant innovation required to master them.



DENISE McCOMISH

Company: KPMG

Title: Partner

Country: Australia

"Diversity is improving, and not just gender diversity but with local communities including indigenous workers being a critical element of the right to mine. Leading mining companies are saying they are passionate about their commitment to inclusion and diversity and we are seeing significant increases in women and local communities represented in the workforce, and increasingly in leadership positions."



GARGI MISHRA

Company: Accenture

Title: Senior Principal Industry Innovation

Country: South Africa

"My introduction to the industry was through the movie Jurassic Park. I wanted to study palaeontology so joined geology, which was offered at only one college in Delhi. On my first day we were introduced to the magical world of minerals under the microscope. It was love at first sight, so mining was an obvious career choice."

After 16 years in mining and exploration, venturing to remote exploration camps and mine sites in Canada, Angola, the Democratic Republic of the Congo, Botswana, South Africa, Lesotho, Australia, and India, Gargi Mishra knows a few things about multicultural work environments.

"I have learned the power of empathy, patience and respecting everyone's values through years of working in cross-cultural, multi-diverse settings," says Gargi, who has managed and trained teams on technology, digitalisation, and innovation.

These days, Gargi's focus is on enabling innovation in Africa. A field geologist and trained kimberlite petrologist, she draws on experience across the mining value chain to help clients innovate new and better ways to work. Like many people passionate about mining, she believes the industry is ripe for innovation, starting with the educational entry-paths that lead to mining.

"Our future workforce is in school or at university and if we aren't yet thinking about changing their curriculum to be future-ready, we've already set ourselves up for the major challenge," she says.

Claudia Monreal is a mining engineer specialised in geo-statistics. She has led geological modelling on mine deposits in Australia, Indonesia, South America, Canada and Chile.

Claudia founded Women in Mining Chile, driven by the loneliness of working without any female colleagues. She notes that less than 8% of the workforce in Chile's mining industry is female, and fewer than 3% of mining engineers. "Very occasionally I get to share a professional table with a woman in mining, and I want to change that," she says. "I want to run into women VPs often, I want to go to gender-balanced mining conferences, and I want mining to hire the very best people, not the very best men."

For Claudia, moving to Australia for a mining engineering role was a life-changing event: "For the first time, I realised I was a woman and nobody noticed," she says. Back in Chile, Claudia is working to change the industry and the culture for her two daughters. "I don't want them to live in a world where it is tougher to be a professional woman."



CLAUDIA MONREAL

Company: Core Mining Studies

Title: General Manager

Country: Chile

"It is amazing how the glass ceiling is actually a glass cage, where women in male-dominated industries remain hidden and protected from the outer world and from growth and responsibilities on mine sites."

WOMEN
IN MINING



"The government has created an opportunity for women to participate in the mining industry. The daily challenges and learning experience keep me focused and I know that one day I will be very successful in mining support services."

TEBOGO MOSITO (MASHEGO)

Company: Ditsogo Projects Pty Ltd

Title: Chief Executive Officer

Country: South Africa

Tebogo Mosito (Mashego) is an entrepreneur who is passionate about the empowerment of women in the mining and manufacturing sectors. After starting her career in a corporate setting, Tebogo founded Ditsogo Projects, a company that specialises in metal fabrication, steel engineering services, and the manufacturing of rolling stock, chutes and conveyor structures for the mining industry.

The idea had been with her for a while: as a child growing up in a rural village of Maile in Rustenburg, Tebogo was fascinated by the long metal structures at Impala Platinum and told herself that one day she would make and sell them. As an adult, she realised that too few women were stepping into the potentially lucrative, capital-intensive mining supply chain, so she dove in herself.

Winning her first contract in 2016, to manufacture all rolling stock for Impala Platinum, made a dream come true and allowed Tebogo to employ 30 locals. Tebogo was recently awarded funding to purchase her own workshop in order to offer 24-hour maintenance services to the mining industry.

WOMEN IN MINING

Malebogo Mpugwa is a specialist in talent management at diamond companies such as De Beers, Debswana Diamond Company, and now Anglo American Group based in London.

In choosing her career, Malebogo found inspiration in the story of diamonds and the outsized impact they have in her native Botswana, where nearly a third of GDP comes from the diamond sector. For Malebogo, joining the industry was a way to contribute to Botswana's success story.

Rising through the ranks from learner to senior executive, Malebogo has been involved in several complex projects, but the one closest to her heart was the landmark relocation of De Beers' rough sales and marketing arm from London to Botswana. Not only did this involve inspiring more than 80 families from London to call Botswana home, but it also set Malebogo on an accelerated path to source, develop and deploy talent. It was a huge challenge, requiring fail-fast experimentation and the creation of a landmark alliance between Botswana's government, the diamond mining industry and tertiary institutions – a project Malebogo is proud to have conceptualised, hosted and led.



MALEBOGO MPUGWA

Company: Anglo American PLC

Title: Head of Talent

Country: United Kingdom

"The right mentorship can be priceless. The journey to success is full of endless challenges and as such, assistance along the way in the form of a trusted and capable mentor is advisable. Be deliberate and considered about the mentor(s) you choose, as for the most part, you become like the people you spend most of your time with."



DESHNEE NAIDOO

Company: Vedanta Zinc International

Title: Chief Executive Officer

Country: South Africa

"When your existing mining industry has historically depended on a large workforce of unskilled or semi-skilled people, mechanisation and digitalisation are seen as threats. We have to ensure that these changes are understood as opportunities for up-skilling and development, allowing employees to do their jobs more effectively. We have to make sure we do not leave people behind."

Deshnee Naidoo's journey from what she describes as a "hard background" to the CEO's office began in 1994, when she was awarded the JCI/Anglo Platinum bursary to do a BSc in Chemical Engineering in Durban, South Africa.

She stayed at Anglo for nearly 20 years, at one point managing two commodities (thermal coal and manganese) across three geographies (South Africa, South America and Australia) as CFO Anglo American Thermal Coal. At Vedanta for the last four years, Deshnee is in the middle of one of the biggest challenges of her professional life: taking the Gamsberg project from unexplored asset to fully operational zinc mine. It's a journey that has veered through "quite literal blood, toil, tears and sweat" and back again – but on the verge of producing the first truckable concentrate, it all feels worthwhile.

For Deshnee, mining isn't just a career: it's a life-changing opportunity for herself, her country and region. "We are not a sunset industry or a historical oddity. Mining can and indeed does make significant contributions to a host country's GDP, to employment, to industrialisation."

Lindiwe Nakedi is one of a small group of women driving diversity at the most senior levels of the mining industry.

Lindiwe is the owner and managing director of Gubhani Exploration, a 100% black female-owned surface exploration drilling company contracting to the mining industry. Gubhani has drilled for Coal of Africa (Now MC Mining), Exxaro, Nkomati Mine of ARM, and De Beers. These days, the company is drilling for South32.

Despite having built several successful companies, Lindiwe grapples with the same feelings of insecurity that plague so many high-achieving women. "One of the scariest things I've done was becoming chairperson of Women in Mining South Africa. I don't have a mining qualification – I come from a humanities background but own a business in the mining industry –so I've had to overcome feeling like I'm not good enough or I don't qualify," she says.

Overcoming that hurdle, tough as it was, yielded an unexpected reward: "I appreciate knowing that I've inspired others to see what is possible in life with confidence and sheer grit in the toughest situations."



LINDIWE NAKEDI

Company: Gubhani Exploration

Title: Owner & Managing Director

Country: South Africa

"There is a shortage of women in leadership and board positions where important decisions need to be made. A drive for leadership development as well as the sponsorship of women who demonstrate high potential will help to meet the gap. There needs to be a greater drive to developing more women leaders and giving them opportunities to lead."

WOMEN
IN MINING



"The industry's biggest challenge is changing economic conditions. Secondly, mentorship programmes are needed to keep women in the mining industry and they should be made available the day you join the company. Thirdly, I believe we need to promote STEM subjects at primary school level in order to develop and mentor the next generation and to further gender diversity."



WOLLEN NELL

Company: Namdeb Diamond Corporation (Pty) Ltd

Title: Red Area Complex

Country: Namibia

Wollen Nell is a chemical engineer who is passionate about getting more women into mining, and, thinking about the mining engineers of tomorrow, getting more school-age girls into STEM.

After joining the De Beers family 13 years ago through a university bursary scheme, Wollen has held a variety of metallurgical roles at two sites, Marine Namibia and Namdeb. In 2013, she became Namdeb's first female plant manager after pushing past a series of challenges and hitting carat production and tonnage targets. As a senior leader at the site, Wollen has helped shape the culture and way of working.

She is particularly proud of the way gender diversity is promoted and the way Namdeb has addressed unconscious bias. "This makes me an advocate for the organisation because of its values," she says.

Since becoming plant manager, Wollen has added risk management to her skill set and completed an MBA. Her research looked at why the number of women in mining isn't increasing, despite steady efforts from governments and mines.

For Wilhemina Ncobo, a career in mining was less of a choice than a necessity: after growing up very poor, the offer of a university bursary for talented, disadvantaged students was too good to pass up. Only in year two of her studies did Wilhemina discover, to her relief, that she was actually quite interested in the subject.

Fourteen years later, Wilhemina is an Operations Manager on the home stretch of an MSc in Mining Engineering. Along the way she has worked as a Product Planning Engineer, a Mine Overseer and a Planning Superintendent. Each role has offered the chance to skill up and develop new competencies. There have been challenges along the way: a fatality when Wilhemina was responsible manager both shook her and sharpened her focus on the responsibility of the job.

It may be this theme – responsibility – that describes Wilhemina's career best. Taking responsibility for her own future, and rising to the responsibilities the job demands. As she puts it, "The industry is not necessarily looking for women, but for leaders."



WILHEMINA NGCOBO

Company: Assmang Pty Ltd

Title: Operations Manager

Country: South Africa

"Diversity is progressing, however slowly. Women's representation, especially in senior roles, is still a challenge. For core mining we need to implement different strategies to keep women interested, as it's still not a conducive work choice for someone who has family."

WOMEN IN MINING



KAY NIMMO

Company: International Tin Association

Title: Manager of Sustainability and Regulatory Affairs

Country: United Kingdom

"In a way, I feel that diversity should be seen as treating everyone fairly and keeping an open mind about people with different experiences and lives. Identifying ways that individuals with unusual backgrounds or skills can bring new ideas is not only more fun, but makes it possible for everyone to contribute to a common objective."

Kay Nimmo leads environmental, social and governance activities at the International Tin Association, the voice of the world's largest tin producers, engaging with stakeholders including the artisanal and small scale mining sector.

One of the oldest metals, essential to humanity since the bronze age, tin has long been a fairly traditional business. But over the last decade, tin mining has experienced tremendous change, and many of the producers Kay represents have made sustained efforts to become more responsible companies – efforts Kay has helped drive.

Kay's most daunting challenge was leading artisanal and small scale miners in transparent improvement and reporting systems in order to avoid tin mining being used to fund armed groups in the Democratic Republic of Congo. To deliver the project, Kay mobilised large numbers of stakeholders and faced – and surmounted – "every kind of" logistical, political and management challenge. "Knowing that a project I created really does make a difference to hundreds of thousands of people's lives, including women and children in Africa, is the most rewarding experience of my career so far," she says.

After beginning her career in administration, Viridiana Nuñez moved to the mining industry 11 years ago and found that her skills and tenacity were in demand. Quickly working her way to bigger challenges and opportunities, Viridiana excelled as a camp supervisor before moving to the large-scale Peñasquito open pit mine in north-west Mexico.

Running facilities, lodging and catering, aerial and ground transportation at Peñasquito, Viridiana is responsible for the upkeep and safety of 4,300 camp services employees and another 1,500 transport colleagues.

She recently implemented an $8.4m USD programme to improve rest and quality of life for those at the camp, and led a series of improvements that saved Goldcorp $4m on camp operations.

In her two years at Peñasquito, Viridiana has distinguished herself as leader of the Creating Opportunities programme, which offers women at Goldcorp the tools and training they need to up-skill and reach their career goals. This year, Viridiana was invited to take part in Goldcorp's Future Leaders 2018 programme – an accelerator course to shape the company's next generation of leadership.



VIRIDIANA NUÑEZ

Company: Goldcorp Inc

Title: Services Superintendent

Country: Mexico

"I come from a place of few opportunities – and even fewer for women. Mining became the resource and change that was needed in my life. It gave me the opportunity to learn and to develop myself. Without any doubt, mining has been a trip. It's an experience that I am proudly living."

WOMEN IN MINING



"I have had many challenges and significant changes during my experience in mining, but the best moment was when I realised that not only was I able to handle the equipment assigned to me, but I frequently did it better than many of my male colleagues."

JAKELINE CLAUDIA OLIVOS CRUZ

Company: Minera Yanacocha SRL/Newmont Mining Corporation

Title: Heavy Equipment Operator

Country: Peru

Jakeline Claudia Olivos Cruz has blazed a trail for women in one of the most traditionally male areas of mining: heavy equipment operations.

Starting her career as the operator of a Caterpillar Tractor D8, Jakeline Claudia moved up to a Haulpack 330M and then became the first woman in Peru to operate a CAT 777 D. Today, she operates the Caterpillar 793 truck and tank truck. Jakeline Claudia traces her interest in large vehicles to her mechanic father: "In an environment where it was not common for women to drive, I learned to drive a car when I was 14 years old. When I learned Yanacocha offered a chance to drive giant trucks, I was thrilled."

In 2010, Jakeline Claudia was named best mine operator at Yanacocha. Since 2017, she has been part of an elected Occupational Health and Safety committee – the first committee to have women as its representatives. It's a journey Jakeline Claudia is taking not just for herself, but, in her words, "To open a space for other women who want to venture into this work."

For more than 24 years, Lynn Olssen has been a champion for women's success in the mining industry.

A geologist who once dreamed of hunting for fossils (alas, she hasn't found many over a career spent in open pit gold mines), Lynn has focused her energies on training and mentoring young mining professionals – something she wishes she had when she started out.

"I still remember walking into the mess the first morning and looking around at a sea of male faces staring at me, with not one woman in sight," she recalls of her first day on a mine site. She found it particularly tough having no one to talk to about the challenges she faced in that workplace.

Today, Lynn works to create change both inside Rio Tinto and in the resources sector, maintaining active membership the state WIMWA summit committee, the Minerals Council of Australia (MCA) Gender Diversity Working Group, and others. Community engagement is something of a habit: a mother of two daughters, Lynn spent several years on the school board as Secretary and Chair.



LYNN OLSSEN

Company: Rio Tinto Ltd

Title: General Manager – Resource Knowledge & Definition

Country: Australia

"For the women and the men: an inclusive workplace is required to enable diversity. Inclusion needs to start at home and in the workplace. Call out inequality where you see it and enable a future where our children have the same opportunities and a level playing field."

WOMEN IN MINING



BEATRICE OPOKU-ASARE

Company: Newmont Mining Corporation
Title: Global Director – Inclusion and Diversity
Country: United States of America

"Diversity is the unique superpower we each bring. The advantages of these superpowers can only be leveraged within inclusive environments where we can be comfortable that what makes us different is celebrated and viewed as an asset. Do not belittle your experiences or viewpoint because they are different from the majority. That difference is a superpower."

We often talk about being the change we wish to see in the world. For Beatrice Opoku-Asare, it's all in a day's work.

Drawing on a career spanning sustainability, health and safety and talent management in the technology and mining industries in Ghana and the United States, Beatrice works with Newmont's board and senior management to build an inclusive workplace.

As a woman and a Ghanaian – making her, at times, doubly in the minority – Beatrice recalls looking up the ladder early in her career and seeing no women in executive roles, and just one Ghanaian. Her role now is aimed at shaping the conditions conducive to attracting a more diverse talent pool – ensuring the women, Ghanaians and other minorities who follow in her footsteps won't have that same moment of wondering if they have a future in this industry. A big part of this is embracing non-traditional talent. "Seeing diversity at the top makes a difference to not only the current workforce but also attracts a diverse workforce of the future," she says.

If you're looking for proof that women can balance work and family whilst still maintaining an upward career trajectory, look no further than Jacinta Parsons.

A metallurgist who joined BHP in Kalgoorlie as a graduate process engineer in 2004, Jacinta transitioned from technical work into leadership roles, leading a production team for the first time in 2010. When the mother of two returned from maternity leave in 2013, she did so part time – and refused to let that hold her back.

"The most meaningful moment in my career is being appointed into a line leadership role as a part-time employee," she says. "It took two years of demonstrated performance as a part-time employee in various technical and influence roles to change the mindsets of the leaders in my organisation."

Since then, Jacinta, who describes her leadership style as having "a propensity for action," has been lauded for her (part-time) work as a technical superintendent, business improvement lead and operations manager. It's a huge achievement, and less than a decade into Jacinta's career, it's unlikely to be her last.



JACINTA PARSONS

Company: BHP Ltd

Title: Operations Manager – Kambalda Concentrator

Country: Australia

"The industry's biggest challenge over the next 10 years is the ability for adaptation in a rapidly changing technological environment. The industry needs to fundamentally change the way in which it operates in order to embrace leading-edge technology and move into fully automated and digitised environments."

WOMEN IN MINING



"Mining is the core business in many African countries, which sometimes base their development exclusively on the proceeds and contributions from the mining industry. This exposes foreign investors to constant operational and legal challenges that need to be mitigated at the national level. As legal counsels, we do that. I'm glad to get this exposure this early in my career."

ALEXANDRA PASCAL

Company: MKS SAS (Glencore Group)

Title: Group Counsel – Company Secretary

Country: Democratic Republic of the Congo

As long as she can remember, Alexandra Pascal liked a challenge. At boarding school as a child, she became her own problem-solver, a person most comfortable when things were a bit tricky.

As a legal graduate, Alexandra set her sights on working in a developing country with a variety of economic and legal risks. She headed to the Democratic Republic of the Congo to do an internship with Glencore. The first few months of camp life were tough, with some male colleagues doubting her ability to the job, "And making sure I felt it."

Speaking up anyway, pushing through the discomfort and focusing on understanding the operation was a learning process that today makes Alexandra proud. She helped establish the legal department in DRC, a 40-person structure providing tax and legal services for the thousands of people who work for Glencore's copper and cobalt mines worldwide.

Early in her career, the future is bright: as the commodities trading industry evolves, Alexandra is convinced it will increasingly need a stable and safe legal environment to grow – one she is committed to building.

As a girl, Dineo Phaladi recalls watching a "soapie" based on the lives of mine workers and thinking she'd like to be a mine manager. She completed a Mining Engineering degree, obtained an underground hard rock blasting ticket, an opencast blasting ticket and a shift supervisory certificate, and kicked off her career.

Now 28 years old, Dineo is living her dream. After joining the industry as a Mining Engineering Technician, she earned the credentials to work as a Mine Manager. She gathered experience in mine planning and efficiency operations, and, in August 2018, Dineo was appointed as the first ever female Mine Overseer at the Kolomela Mine – a role she calls "sheer bravery." For Dineo, the combination of ensuring the health and safety of 120 people while achieving production targets is the most fulfilling role she has ever had.

"What is exciting for me, is that now, I'm no longer watching things happen on the sidelines or waiting for things to happen. I get in there, get dirty and make things happen," says Dineo.



DINEO PHALADI

Company: Anglo American PLC – Kumba Iron Ore

Title: Mine Overseer

Country: South Africa

"A platinum belt has been identified in the community where I grew up in. My life and career will come full circle when I will be able to safely extract mineral wealth from a farm that my great grandparents used to cultivate for agricultural benefit."

WOMEN IN MINING



BEATRICE PIERRE

Company: Glencore PLC – Altonorte Smelter

Title: General Manager

Country: Chile

"It inspires me to think about the many pioneers and trailblazers who have come before me. As women in mining, we are working every day to make a difference for the future generations. I am grateful for all the women who endured hardships, discrimination and sexism so I can work in mining. I want to make them proud!"

Beatrice Pierre has carved a path for women in Chile's mining industry, overcoming prejudices ranging from the expected male exclusivity to something a little less, well, rational. "Until 1996, women in Chile were banned from working underground, as their presence was believed to bring bad luck," she explains.

Far from bringing bad luck, Beatrice's efforts have yielded rewards not just for herself and other women, but for the industry. After starting her career in process engineering at Falconbridge in Canada, Beatrice moved to Glencore, consolidating experience in milling, zinc leaching, project management, copper refining and smelting. In 2012, she became the first woman plant manager of Glencore's recycling site in Rhode Island, US. Returning to Chile, she became the first woman General Manager (GM) of Glencore's Altonorte smelter in Antofagasta, Chile's mining capital.

Beatrice's appointment as GM challenged that status quo in Chilean mining, where women are woefully absent from senior roles. If she has anything to do with it, by pushing for gender equality and participating in initiatives to increase the proportion of women working in mining, change is coming.

Sara Prendergast has worked in the Australian mining industry for more than 15 years, living in a range of remote outback locations while working across a variety of commodities and tackling challenges that have fast-tracked her career growth – all as a single mother.

Overcoming challenges is a theme in Sara's life. After growing up in an abusive home, she spent her teens as the sole carer for her terminally ill father. Despite being diagnosed dyslexic, Sara completed several post-graduate studies and excelled as valedictorian. Her own beginnings have shaped how she gives back to her community: Sara is an active mentor, dedicated to helping women and young people from marginal backgrounds find economic independence in the industry she loves.

"I have remained in the industry as it continues to offer professional and personal opportunity as well as large scale achievement," she says. "I enjoy the diversity in the people that mining attracts and the sense of community the industry creates, which has enabled me to be surrounded by incredibly inspirational people."



SARA PRENDERGAST

Company: Orica Ltd

Title: Senior Manager – Performance Reporting

Country: Australia

"Social licence to operate is a particularly significant challenge for mining. In general, mining has lifted the living standards of the world's most poor, not only from direct economic development benefits for communities but also by contributing to living standards through goods and products made from a minerals base. We should talk loudly about the gains and the benefits."

WOMEN IN MINING



"I would advise any woman entering the industry to demonstrate that she is an integral part of the system – a team member whose contribution is critical to the process and equally valued. Be bold and give your very best. A shining example is Lilian, one of the best drill masters at our Prestea underground mine in Ghana."

MONA QUARTEY

Company: Golden Star Resources Ltd

Title: Independent Director

Country: Ghana

Mona Quartey has knocked down barriers not just for women in Ghana's resources industry, but also for Ghana itself.

The former Deputy Minister of Finance has worked for 27 years in finance and mining, gathering extensive experience in treasury and risk management and advising large corporate institutions, small to medium sized state-owned enterprises, and government ministries.

As Group Treasurer of Ashanti Goldfields, Mona was the lead executive for the landmark transaction, rolling out the IPO of Ashanti Goldfields on both the London and Ghana Stock Exchanges. Her most prized moment was when the New York stock exchange bell was rung to commemorate the listing of the first Ghanaian company. For Mona, "This singular act put Ghana on the world map and showcased Ghana as a responsible gold mining country."

A member of several boards who is currently pursuing a Masters of Law alongside her professional duties, Mona sees the industry's next challenge as applying technology to improve safety for both people and the environment.

Catherine Raw cites her mother as one of her greatest inspirations. A successful career woman who reached the top of her field, she left no doubt in Catherine's mind that she could do anything she set her mind to.

Following her interest in geology into mining, Catherine worked with Anglo American Plc in London and Johannesburg before joining BlackRock in 2003 and co-managing one of BlackRock's flagship mining funds. In 2015, having just had a daughter, Catherine moved to Barrick Gold, taking a new role in a new company, in a new country. "Taking the leap from being an investor in the mining industry to actually putting the theory into practice was the bravest, most exciting moment of my career," she says.

At Barrick, Catherine moved from Executive Vice President in the business performance division to CFO in just a year, and in the merger of Barrick Gold and RandGold Resources, she will become COO for North America. If Catherine's daughter is watching, it seems that the family tradition holding strong.



CATHERINE RAW

Company: Barrick Gold Corporation

Title: Chief Financial Officer (becoming COO North America)

Country: Canada

"The biggest challenge for our industry is attracting talent. Encouraging young, bright and ambitious people into the industry will be the most important way of overcoming all the other challenges we face. We need to illustrate that we are a modern, innovative and necessary part of the global economy, providing the foundations for almost all other industries."

WOMEN IN MINING



MARNY REAKES

Company: BHP Ltd

Title: Head of Closed Sites

Country: United States

"There are so many possibilities for closed mine sites beyond what we see now. As sustainability becomes more of a focus within the resources industry, innovative management and transitioning of closed sites will become more important not just to mining companies, but to the communities they operate in."

Marny Reakes works within BHP to change the way the resources giant thinks about its legacy and its duty to manage the longest part of a mine's life: once it is closed.

What to do with a mine once it closes is a question that covers environmental, social, economic and health and safety issues, to name just a few. It's a question that will only be asked more frequently as mines finish their mineral-producing lives and are closed. Marny has pursued initiatives to turn closed sites into new, value generating resources, moving past remediation to post-mining repurposing. She has also quietly promoted diversity within her teams and the organisation, spearheading moves by the Sustainability Board within BHP to lay out a position on closure and repurposing.

Colleagues know Marny as someone quiet and humble – "Never one to proclaim her own successes, she isn't even aware that I am nominating her for this," said the colleague who put Marny forward for this honour.



As long as she can remember, Janet Reuben-Lekashingo wanted to work in human resources in a challenging environment. Frustrated that her husband's job in Geita, a remote part of Tanzania, was keeping the two apart, a solution presented itself: Janet would join the mining industry. She went on to become the first female HR manager at Geita Gold Mine.

Years later, Janet is hooked on mining's diversity and constant pace. With corporate and mine site experience, she has constant access to the challenging environment she loves. Given the industry's general lack of down times, Janet has ample opportunity to do the thing she loves most: enabling people to reach their full potential.

One of Janet's toughest experiences in mining was also her most rewarding: leading a team that was involved in transitioning Acacia's HR system. The process involved changing a 13-level organisation into four levels at the mine sites and six levels in corporate offices – a project that took three years and involved three operations, three corporate offices and an exploration company operating in five countries.



JANET REUBEN-LEKASHINGO

Company: Acacia Mining PLC

Title: General Manager, Organisational Effectiveness

Country: Tanzania

"The industry's biggest challenges are resources scarcity and license to operate, which is linked to changes in the political environment, conflicts with the local community and environmentalists. The other challenge is the need for new technology that will automate and digitalise the mining industry, and could also increase safety and efficiencies."



"I believe that the industry's biggest challenge will be the changing nature of roles, and work expectations. Automation and technological improvement will require different skill sets to the way work is traditionally done. I believe this will require higher focus on training and education in these areas."

APRIL RICHARDSON-SCHUCH

Company: South32 Ltd

Title: Work Management Planner – Electrical

Country: Australia

Six years into her mining career, April Richardson-Schuch feels fortunate to see a growing number of women when she looks up the career ladder.

When April commenced an electrical/instrumentation apprenticeship for BHP Billiton (now South32), at the Worsley Alumina Refinery in Western Australia, there were far fewer women in the trades. April is part of a cohort changing that: at the conclusion of her apprenticeship, she became the first female member of the high voltage electrical department on site. When the opportunity to get more involved in apprentices' training arose, April seized it. She now acts as a mentor in Work Inspirations, an on-site programme designed to highlight to young women some of the potential career paths and training options they might not have realised were available.

Completing an apprenticeship offered April not just training, but, upon qualification, the landmark feeling of having, in her words, "earned my place." For April and the women who follow in her footsteps in Western Australia's resources industry, that place is growing – fast.

WOMEN IN MINING

Agnes Ritter is a senior manager at of one of the largest Russian metals companies, and the only woman at in Severstal's senior management ranks.

Drawing on early career experience with the Boston Consulting Group (BCG) where she worked in operational and organisational efficiency in heavy industry, in 2010 Agnes moved to Severstal's resources division. Here, she turned her focus towards developing steelmaking technologies. Setting herself apart with an unusual ability to manage huge and complex projects, Agnes was appointed Director of Operations and Technology after just three years at Severstal. A number of high-profile company programmes were implemented under her guidance, including a project to improve performance and reposition mining companies, and Severstal's 800-member Internal Expert Network.

Agnes also plays a crucial role in enhancing cooperation with external partners, developing the capabilities of technicians to a global standard, and overseeing a large-scale product engineering transformation that encompassed quality and product control, as well as the company's research and development subdivision.



AGNES RITTER

Company: OAO Severstal

Title: Chief Technical Officer

Country: Russia

"I think it's important to take a progressive approach towards innovation and outstanding leadership skills. In addition to improving Severstal's operating and organisational performance, I lead several strategic corporate culture development initiatives, including Severstal's women's club, the first club of its kind among Russian steel companies, promoting women in leadership."



SILVIA RENE RODRIGUEZ

Company: Orocobre Ltd

Title: Shared Value Manager

Country: Argentina

"Mining is still heavily dominated by men, and very skewed to masculine models of power, strength and extraction. It is, however, an industry that enables significant professional growth. Women can really enrich discussions and innovate in this industry. But to do so they have to dare to participate fully in all sectors and at all levels."

Silvia Rene Rodriguez is driving changes at the intersection of mining legislation and social development.

Entering Argentina's resources industry as foreign investment began flowing into the region, she saw early on the positive impact the industry could have on communities and livelihoods. Working to reframe and align mining legislation with social development has brought Silvia into close contact with some of Argentina's most isolated indigenous communities. In 2004, she attended an indigenous Assembly meeting in the Puna region 4200 meters above sea level, which was one of the pivotal moments of her career. It took time and patience to gain the community's trust, but Silvia explained the project and eventually brought them on board. With a green light for construction and operation of the Olaroz project, Silvia worked to steer benefits – such as educational, health and entrepreneurship programmes – back to the surrounding indigenous communities.

Looking to the future of mining in Argentina, Silvia Rene is dedicated to supporting the development of an inclusive mining model – one that promotes resource development through social investment, community engagement and participation.

Joining the mining industry came naturally to Anne Marie Rushworth, who grew up in a mining town, with a father in iron ore and grandfather in gold. Her path once she entered the industry was anything but typical, moving from managing iron-ore mining laboratories, to sales and production planning, to product inventory logistics, to vessel planning.

For Anne Marie, change has been a harbinger of growth. She cites a major expansion project in 2015 as the most exciting moment in her mining career ¬– a time where all teams were pulling together, taking on huge amounts of work, and having to work in new ways to achieve more with less.

When it comes to diversity, though, change may still be waiting in the wings. Over 29 years in the industry, Anne Marie has never worked for a woman. "But fortunately, I've worked mostly for and with men for whom it didn't seem to make a difference that I was a woman," she says.



ANNE MARIE RUSHWORTH

Company: ArcelorMittal Infrastructure Canada

Title: Port Master

Country: Canada

"The ongoing need to adapt to changing market requirements is bringing diversity to the iron ore mining sector. We continue to mine iron ore and transform it into concentrate and pellets, but the specifications of these products has had to adapt to a changing client base. We are also being challenged to reduce our environmental footprint."

WOMEN
IN MINING



"Even having a finance background and working in finance for over 20 years, I believe mining is about more than providing financial results and returns to shareholders. We must have a strong commitment to our social responsibility with communities, to the environment, to our employees and other stakeholders. This is our legacy as an industry."

ANA SANCHES

Company: Anglo American PLC – Iron Ore and Nickel

Title: Chief Financial Officer

Country: Brazil

After a 20-year journey that took her from internal auditing, to a financial controlling position in the cement industry, to a CFO role with Anglo American, Ana Sanches has added a new hat to her portfolio: representing Brazil in the company's global working group on inclusion and diversity.

Finance and corporate change aren't the most natural of bedfellows, but Ana's career has been shaped by her own values of inclusion, responsible stewardship and sustainability. "I am so glad to have the opportunity to work for a company that operates this way," she says.

Ana offers an example to illustrate that feeling of belonging. Earlier this year, an incident on an operation interrupted production for a long period of time – "completely unexpected, a big crisis for us." Anna describes how, in the wake of the crisis, teams pulled together, senior leadership stepped up, HQ came forward to help and staff on the ground worked hard to get the job done whilst being transparent and responsible. "It was an enormous learning and growing experience," she says.

WOMEN IN MINING

Maria (Ria) Sanz Perez spent her early career qualifying as an attorney in the Supreme Court of South Africa before shifting to commercial transactions, legal risk management and compliance. Ria gathered experience in some of South Africa's largest global companies including Investec, Sappi and Afrox/BOC. From there, the mining industry called in the form of an opportunity with AngloGold Ashanti, and Ria happily answered.

A veteran of male-dominated industries, Ria felt at home in mining from the first. "I believe that we are recognised for our skills and I have focused on standing out from the crowd," she says.

She did just that when the price of gold dropped after its 2011 high. "We were all required to lead and I was charged with the review of our corporate costs – not exactly the usual portfolio of the general counsel," Ria recalls. She implemented changes which contributed to the company-wide cost reduction initiative which enabled the company to resume dividend payments. "I take great pride in the work that was done by the team and the culture change that took place," she says.



MARIA (RIA) SANZ PEREZ

Company: AngloGold Ashanti Ltd

Title: Executive Vice President – Legal, Commercial and Governance, and Company Secretary

Country: South Africa

"I would advise a woman starting out in this industry to have a game plan. Find a mentor to guide you and partner in your development. Equally be part of reverse mentoring. There have never been so many generations working alongside each other as today and your perspective will be invaluable to others."

WOMEN IN MINING



SHIVANI SHARMA

Company: First Quantum Minerals Ltd

Title: Mining Engineer – Optimisation

Country: India

"The sustainable development of mining mineral resources is the key to the security of depleting non-renewable mineral deposits. To promote sustainable development, we need to incorporate the recycling and reuse of metals. Additionally, technological improvements in mining and mineral processing could reduce costs and permit profitable mineral production from previously uneconomic, mineralised rock."

Mineral engineer Shivani Sharma takes pride in being the only expatriate woman on her team at a site in rural Zambia. And why not? For much of Shivani's thus far brief career, she has stood out: as the gold medallist in her graduating class at the Indian School of Mines; as the top mineral engineer in her first job; as the recipient of a full merit-based scholarship at the University of Kentucky.

If you ask Shivani, it's her work that stands out. Shivani's expertise is in process control, fine particle processing, simulation of process flow diagrams, optimisation of drill and blast operations, energy conservation and safety programmes. From a Master's thesis that set out how Alliance Coal could save more than $10m, to a self-designed Excel-based programme for pump and pipe size selection, Shivani loves using her knowledge and understanding to save millions of dollars for the industry. "For me, this stirs a feeling of purposefulness and makes me feel that I can make a difference and have a long term impact in mining," she says.

Makhosazana (Khosi) Sibisi is a social entrepreneur who founded and leads a consulting company that offers services to help mining companies operate in a more sustainable way. She specialises in social impact assessments, social and labour plans, research, socio-economic development, community resettlement, grave relocation and occupational health and safety.

"All I wanted was to learn the business side of mining and change people's lives," says Khosi, who took her first steps in this direction when she left employment and embarked on an entrepreneurial journey, establishing a coal mining company with three female partners. The company now employs more than 100 people.

Khosi founded WaterBearer as a way to positively impact mining companies' interactions with the communities around them. "There is evidence of companies not complying with the stipulated regulations and if the status quo remains, when the mines close, there will be thousands of people living under extreme poverty," she says. Working with stakeholders including the government and mine owners, she hopes to change this.



MAKHOSAZANA SIBISI

Company: WaterBearer Sustainable Development

Title: Chief Executive Officer

Country: South Africa

"The future of mining is mechanisation and that is going to have an impact on jobs. When a mining right is issued, a social and labour plan has to be lodged with the Department of Minerals outlining the company's plan regarding the development and empowerment of their employees and contributions towards the socio-economy of nearby communities."

WOMEN IN MINING



"I take challenges as motivation for personal growth. I was looking for new opportunities in industries that were more challenging, and the mining industry happened to be one of them since it was male dominated and women were still facing challenges."

STELLA SKOSANA

Company: Bafokeng Rasimone Platinum Mine

Title: Executive Secretary

Country: South Africa

Stella Skosana is a 34-year-old single mother "from humble beginnings" who has refused to let her circumstances dictate her future outcomes and successes.

After completing a qualification in business management, Stella started work as the personal assistant to the head of the department of transport, roads and personal safety. Seeking a challenge and an opportunity to continue her own development, Stella moved to the mining industry and became PA to the General Manager for concentrator operations – a position she has held for more than a decade. During this time, Stella developed a self-defence course for women at the concentrator operations, which received widespread praise and was featured in the mine magazine. "Coming from an administration background, this project gave me an opportunity to engage with female employees and understand their challenges, fears and aspirations for personal growth," she says.

All the while, Stella has pursued her own education, earning qualifications in HR and management. Today, she is studying to be a chartered secretary with the South African Law School.



For Kamilla Slowikowska, mining was always a likely outcome. Growing up in the Polish Copper Belt, Kamilla watched as her family, friends and environment all become involved in the mining industry. After her love for science and technical subjects led her to mining school, Kamilla built a career as a mechanical engineer – a career colleagues say is characterised by a deep commitment to working for the betterment of her company and the industry.

Coming from a community shaped by mining, Kamilla understands the power it holds over families and communities – something that came into focus on her first descent underground. "It was a true confrontation of theory and practice. I understood the hardships of the work of a miner, and this experience has stuck with me ever since," she recalls.

Thinking about the work of miners and its importance to them and their families motivated Kamilla during her participation in the Concession 2013 –a major project that enabled further excavations in the mine and the functioning of KGHM on the mining market for the next 50 years.



KAMILLA SLOWIKOWSKA

Company: KGHM Polska Miedz S.A.

Title: Lead Specialist, Metallurgy Technology

Country: Poland

"I would like women who choose a career in mining to remember that they did not end up there by accident, but because they had the knowledge and aptitude. They should not be afraid to voice their ideas and opinions. I would also like them to benefit from the experience and support of other women."

WOMEN IN MINING



MARCIA SMITH

Company: Teck Resources Ltd

Title: Senior Vice President, Sustainability and External Affairs

Country: Canada

"Networks can be hugely beneficial for women professionally, but they can also be powerful platforms for creating social change. For women in this industry and others, finding like-minded people to align with around shared goals is vital."

As Senior Vice President, Sustainability and External Affairs, Marcia leads a diverse portfolio that includes health and safety, sustainability, environment, communities, government relations, corporate affairs and relationships with indigenous peoples. She is chair of the management committee for Teck's Red Dog Operations, an innovative mining venture with the Iñupiat people of Alaska.

Marcia also chairs a number of industry boards and is active on the Council for Clean Capitalism. She has more than three decades of experience in public affairs and has advised cabinet members in two Canadian provinces on government relations and stakeholder communications. While mining is a reasonably new industry to Marcia, she has a rich background in handling complex issues and multi-stakeholder challenges – skills she has put to use with Teck.

Marcia is a founding member of UNICEF Canada's 25th Team, a network of Canadian women raising funds to support women and children in developing countries. She is also a recipient of the Business in Vancouver 2016 Influential Women in Business Award.

Ami Soumare is the Founder and General Manager of SAFIMA, a company offering logistics, heavy truck and machinery maintenance, industrial container remodelling and human resources training to the mining industry throughout Mali.

Ami's journey from what she calls "humble beginnings" to running her own successful company was propelled by intellectual curiosity and a drive to excel. She is a graduate of the University of California, Berkeley, and a former hedge fund analyst and private sector development specialist for the World Bank Group.

After gathering experience working for others, Ami took the plunge and started up on her own. She built a service the industry needed, with values she was proud to live up to: safety, honesty, integrity, transparency and innovation. "I worked for five years to put together the value proposition and understand the key actors and dynamics," Ami says.

Adjusting her service offering to meet shifting client needs, Ami has seen demand for her business grow: SAFIMA now employs 124 staff across Mali. "I have become a contractor of choice and I absolutely love that," she says.



AMI SOUMARE

Company: SAFIMA SARL

Title: General Manager

Country: Mali

"Diversity – both gender and skin colour – is getting better, in my opinion. In Mali, I have noticed that international companies are offering more and more management positions to locals and nationals. Women are also very sought after."

WOMEN IN MINING



"It's not about who's doing the right thing or the opponent – it's about your own personal journey, expertise and talent. How we use our skill set to play all 18 holes and play them well! This is something that I tell my daughters."

NAMRATA THAPAR

Company: International Finance Corporation

Title: Global Head, Mining

Country: United States of America

Namrata Thapar is Global Head of Mining for IFC, the private sector arm of the World Bank Group. She leads an investment team responsible for supporting the mining sector and developing IFC's mining business with a focus on sustainability and development impact across emerging markets. "Perhaps the most rewarding things I have seen are the economic multiplier effects on the local communities, benefits provided by shared infrastructure development like rail, ports, and roads, and the broad economic growth mining can provide at a national level," Namrata says.

Namrata is quick to credit the people around her –high-performing teams and managers she has learned from and mentors who have encouraged innovative thinking. She has also benefited from training and leadership programmes offered by IFC. But for Namrata, a golfer, there is a vital parallel to be had between career and the green: "A golfer has a level playing field. I am not playing against anybody, only against the course and myself. So my advice to women is to challenge themselves and build their expertise and skills to get better."

Joining Yanacocha in 2001, Violeta Vigo quickly learned that while the company had been carrying out social investment projects for seven years, the society it operated in did not see them as a contribution to sustainable development. Rather, people saw CSR as mitigation planning – a corporation covering its bases in case things went wrong.

Creating and leading the company's Los Andes Association of Cajamarca (ALAC), Yanacocha's organisation that contributes to sustainable human development, in the socially and environmentally charged context of a mercury spill only added to the challenge. Violeta was undaunted. "I was motivated by new concepts and practices around corporate social responsibility with an emphasis on sustainable development and the relationship between business and community," she sayd.

Today, ALAC is recognised as the corporate organisation of Yanacocha that, from a social responsibility and sustainable development approach, contributes to its viability and legitimacy. The practices ALAC has embraced under Violeta's leadership – working in alliances, mobilising resources and influencing public policies – have become a benchmark for other mining companies in Peru.



VIOLETA VIGO

Company: Minera Yanacocha S.R.L.

Title: Directora Ejecutiva ALAC

Country: Peru

"The biggest challenge for the industry is to be a good neighbour and a good citizen, not worrying about the environment is no longer an option. The success of the industry will increasingly depend on the integration of the social environment. Companies need sustainable communities to thrive, and communities to be sustainable need successful businesses."

WOMEN IN MINING



DHAKSHI WEERAWARDENA

Company: BHP Ltd

Title: Production Scheduling Superintendent

Country: Australia

"The industry's biggest challenge is retaining its increasingly diverse workforce and building a diverse talent pipeline. We need to understand why women leave the industry and tackle the root causes. Continued focus on flexible work arrangements that can suit different lifestyles and supporting women returning to work from parental leave will make the industry more attractive to women."

Despite growing up in mining towns in both Sri Lanka and her adopted homeland of Western Australia, Dhakshi Weerawardena wasn't certain about mining as a career choice.

"I expected that it would be difficult for me to fit in and be heard as someone who didn't fit the stereotypical image of a miner," says Dhakshi. "But I found that once you break though the rough facade, you'll find a great bunch of men and women who are willing to help you grow."

After completing BHP's graduate programme, Dhakshi became a Mine Services Supervisor at age 25.

She was daunted: a new site, an all-male team of 16 very experienced operators, and a new area (ancillary equipment). Dhakshi visited each employee in the field and listened to their ideas and values, and sought feedback on her own management style. The result: her team improved output, achieved 365 days injury free and became the most productive mine services team in BHP Western Australia Iron Ore. "To me, these results were an indication that I had successfully overcome the challenge," says Dhakshi.

Susanna Woodward's career is proof that for women in mining, networking works.

As a geology student fascinated by diamond mining – she calls it "the ultimate treasure hunting" – Susanna she gained a work placement at De Beers through the WIM network. After graduating, she joined De Beers as an analyst, working across the entire diamond pipeline and helping produce the first edition of The Diamond Insight report. Diamond mining has taken Susanna to extreme and remote parts of the world – something she loves. Highlights so far include visiting the snowy Gahcho Kué mine on the edge of the Arctic Circle in Canada, exploring the Orange River and coastal diamond mines in Namibia, and venturing deep underground in South Africa.

After being helped along her journey by other women, Susanna is eager to pay that support forward. As an advocate for the De Beers Group Ambassadors for Good programme, she has forged further collaboration with De Beers Group and WIM. Susanna also works at ensuring the company's brands are a force for good through gender-equal marketing campaigns.



SUSANNA WOODWARD

Company: De Beers Group

Title: Diamond Revenue Analyst

Country: United Kingdom

"My advice to a woman entering the industry today is to be engaging and to get involved in activities outside of your day to day role. It has helped me tremendously to get to know people in many different positions across the company and the industry, which in turn opens up a lot of doors."

WOMEN IN MINING





"My top piece of advice to any women entering the industry is to learn to be resilient. Careers are made up of ups and downs and successes and failures. We have a habit of being critical of our own performance when we make mistakes, but learning to be resilient can be one of the most important skills towards career success."

JENNIFER WYLLIE

Company: Sirius Minerals PLC

Title: Head of Investor Relations

Country: United Kingdom

Jennifer Wyllie came to the resources industry from investment banking, where she worked mainly in UK equity financing including IPOs and secondary equity financing structures.

After eight years in banking, Jennifer fell into mining largely by accident, but has stayed in the sector for the diverse career opportunities and the people. Going in-house to work at a mining corporate developing the world's largest and highest grade deposit of polyhalite has brought about many changes, but one constant is the thrill of closing a deal – "No matter how big or small."

As a career shifter from banking to mining, Jennifer has first-hand experience of two traditionally male fields. From her perspective, the mining industry continues to lag behind many other industries when measuring diversity, particularly gender diversity and particularly at senior levels. Although she sees a lot of positive action being taken by corporates and other bodies to improve the statistics, progress has been slow and more must be done to convince women to join and stay in the industry.

Growing up in a small mining town, at the age of 16, Shannon Youd was faced with limited career options: get a job in customer service at the local shops, go to university or get a trade at the local mine. She chose an electrical/instrumental dual trade, and just marked 26 years in the mining industry.

In those early years of working in a male-dominated space, Shannon didn't embrace being different. She spent a long time trying to fit in. But eventually, she recalls, "I've learned that what makes me different is actually my strength."

For Shannon, this translates to tackling head-on the challenge of getting more women to enter and succeed in trades. She encourages women to ask bold questions, to sit at the table and truly believe they belong there.

Shannon's own career shows that skilled, tenacious women do belong here: she recently won the Chamber of Minerals and Energy People's Choice Award and earlier this year was a finalist for the West Australian Women in Resources Award in the Outstanding Operator, Technician and Tradeswoman category.



SHANNON YOUD

Company: Kalgoorlie Consolidated Gold Mines Pty Ltd (KCGM)

Title: Senior Maintenance Planner

Country: Australia

"There were two female electrical apprentices in my group when I started in 1991. Twenty-seven years later, in the company I work for now, there are two female electrical apprentices. It doesn't feel like we've come very far."



NOMPUMELELO ZIKALALA

Company: De Beers Consolidated Mines

Title: Deputy Chief Executive Officer

Country: South Africa

"I stay in mining because of the work we have driven to improve people's lives through our product (diamonds are about emotional connections), our communities (nothing beats the feeling of seeing improvement driven by our business), our environment (we recently started moving elephants more than 1,000 miles to protect two African habitats) and working with committed De Beers employees."

Nompumelelo (Mpumi) Zikalala originally wanted to be a doctor, but changed her mind after Anglo American recruiters visited her high school, enticing her into mining with talk of a "difficult industry" and the constant challenge of proving that "nothing is impossible."

A decade later, at the age of just 28, Mpumi was appointed General Manager of Kimberley Mines and found herself with ample opportunity to test out both of these theories. It's a phase of life she looks back on fondly – one that taught her vital lessons and instilled in her the belief that true leadership is about driving to get the best out of people.

Since then, Mpumi has refined her leadership vision and abilities as GM of Voorspoed diamond mine operations, leading a diamond trading business and today as Deputy CEO of De Beers Consolidated Mines. Passionate about safety leadership in mining, as well as youth and female empowerment, Mpumi believes that we can achieve significantly more in business and society if we embrace diversity and inclusion.

IN MEMORIAM



Dee Bradshaw

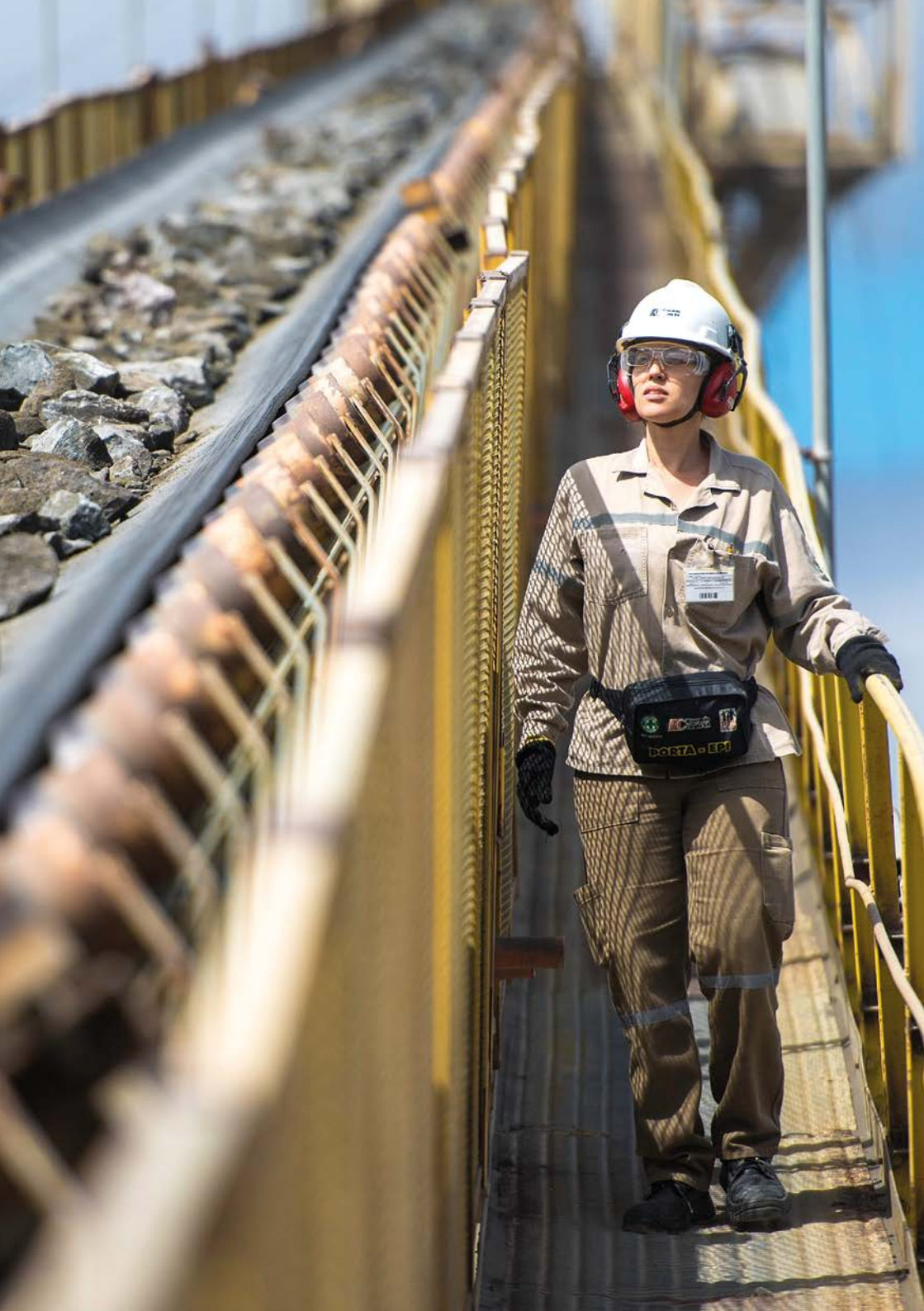
The global mineral processing community has lost a teacher, a leader and a friend.

Emeritus Professor Dee Bradshaw passed away on 7 June 2018 after a battle with cancer. She was 59 years old.

Dee distinguished herself as an expert in the field of flotation and an award-winning teacher. In 2018, she saw the launch of her book 'Green Mining: Beyond the myth' – an event attended by senior representatives from government, AngloGold Ashanti and the University of Cape Town (UCT), as well as colleagues, students and friends. Dee's book is the capstone on a career defined by intellectual curiosity, thought leadership and a hunger to tackle society's most complex problems.

It was a reflection of Dee's generosity of spirit that she put so much energy into nurturing her graduate students and helping them make the most out of every opportunity. Her legacy reflects this: in Dee's last weeks, she established the Dee Bradshaw and Friends International Travel Scholarship for postgraduate students in the minerals discipline. Through this self-sustaining fund, Dee's zest for life, science and learning will live on in the students whose horizons and professional networks are broadened through travel.

In the days and weeks after Dee's death, friends, colleagues and students spoke of her positivity, her drive, her passion for minerals and the mining industry. More than one person described Dee's kindness – the way she made anyone who entered her orbit feel like they were the most important person in the world.


PORTA - EPI

2013 EDITION OF 100 GLOBAL INSPIRATIONAL WOMEN IN MINING

Ruth **Allington**
Lyn **Anglin**
Kelia **Aparecida dos Santos**
Maria Consuelo **Araujo**
Margaret **Beck**
Maryse **Belanger**
Heather **Bell**
Janet **Bewsey**
Elena **Bezdenezhnikh**
Vicky **Binns**
Catherine **Boggs**
Sue **Border**
Fran **Burgess**
Marion **Bush**
Jean **Bustard**
Meredith **Campion**
Eileen **Carr**
Liv **Carroll**
Cynthia **Carroll**
Deborah **Caudle**
Dr Megan **Clark**
Sandra **Collins**
Jacynthe **Côté**
Vivienne **Cox**
Patricia **Dillon**
Karen **Dingley**
Dominique **Dionne**
Caroline **Donally**
Elaine **Dorward-King**
Heather **Ednie**
Samantha **Espley**
Joanne **Farrell**
Marnie **Finlayson**
Donna **Frater**
Janet **Gellici**
Jodie **Gray**
Louise **Grondin**
Vanessa **Guthrie**
Reinet **Harbidge**
Cornelia **Holtzhausen**
Jennifer **Hooper**
Harriett **Hunnable**
Michelle **Iles**
Edda **Ivan-Smith**
Jenny **Kalidheen**
Ilknur **Karabey**
Sinead **Kaufman**
Alison **Keogh**
Tracey **Kerr**
Khanyisile **Kweyama**
Kirsty **Liddicoat**
Deirdré **Lingenfelder**
Catherine **Mcleod-Seltzer**
Amanda **Magro**
Kalpana **Maharage**
Tina **Markovic**
Jane **McAloon**
Deborah **McCombe**
Lisa **Mirtsopoulos**
Elia Morales **Zarate**
Alison **Morley**
Melinda **Moore**
Laura **Mottola**
Covadonga **Muruzabal**
Simone **Naciff Frazao**
Pamela **Naidoo**
Ana Maria **Nazareth Costa**
JoAnne **Nelson**
Grace **Pule**
Carolina **Ramos**
Rachel **Rhodes**
Charlene **Ripley**
Oyun **Sanjaasuren**
Francesca **Santinell**
Prishani **Satyapal**
Sally **Schofield**
Sabina **Shugg**
Julie **Shuttleworth**
Marina **Shvetsova**
Laura **Skaer**
Dr. Erica **Smyth**
Vania **Somavilla**
Rachel **Speight**
Andrea **Sutton**
Myfwangy **Szepanowski**
Dafna **Tapiero**
Deborah **Thomas**
Eira **Thomas**
Vanessa **Torres**
Heike **Truol**
Florence **Uazukuani**
Beatriz Uribe **Restrepo**
Debra **Valentine**
Anne **van Ysendyck**
Susan **Visser**
Fransie **Vosloo**
Donna **Weston**
Ludivine **Wouters**
Zoe **Yujnovich**
Kehui **Zhang**

2015 EDITION OF 100 GLOBAL INSPIRATIONAL WOMEN IN MINING

Kathleen **Altman**
Catherine **Apthorpe**
Joyce **Aryee**
Michelle **Ash**
Adiki **Ayitivie**
Georgette **Barnes Sakyi-Addo**
Ann **Batisse**
Julie **Beck**
Sophie **Bergeron**
Anushika **Bhana**
Christine **Blackmore**
Lynda **Bloom**
Italia **Boninelli**
Lisa **Bradley**
Laurie **Brlas**
Melissa **Brown**
Hilary **Byrne**
Zeinab **Camara**
Froydis **Cameron-Johansson**
Cheryl **Carolus**
Liv **Carroll**
Deborah **Caudle**
Anne **Chalmers**
Andrea **Cornwell**
Aline **Cote**
Wing-Yunn **Crawley**
Daniella **Dimitrov**
Claudia **Diniz**
Mette **Dobel**
Caroline **Donally**
Elaine **Dorward-King**
Heidi **Edwards**
Catharine **Farrow**
Chantal **Francoeur**
Andrea **Freeborough**
Joanne **Freeze**
Diane **Garrett**
Betty **Gibbs**
Natalia **Golovkina**
Euridice **Gonzalez**
Sarah **Gordon**
Betty-Ann **Heggie**
Jeane **Hull**
Ruth **Ives**
Pippa **Jeffcock**
Jayde **Johnson**
Zayaan **Kahn**
Tracey **Kerr**
Sheila **Khama**
Ashley **Kirwan**
Johanita **Kotze**
Maggie **Kotze**
Michelle **Lawson**
Jeanne **Le Roux**
Carmen **Letton**
Vanessa **Lickfold**
Courtney **Lynn**
Siza **Majola**
Rebecca **Major**
Faby **Manzano**
Olivia **Markham**
Tina **Markovic**
Andrea **Marsland-Smith**
Almorie **Maule**
Elena **Mayer**
Jeannette **McGill**
Aoife **McGrath**
Catherine **McLeod-Seltzer**
Angelina **Mehta**
Patrice **Merrin**
Simangele **Mngomezulu**
Moetlo Maria **Moganedi**
Emily **Moore**
Marian **Moroney**
Trisha **Naidoo**
Aissatou **Ndong**
Priscilla **Nelson**
Daphne Mashile **Nkosi**
Veronica Nyhan **Jones**
Kellie **Parker**
Noleen **Pauls**
Louise **Pearce**
Genevieve **Pearson**
Anastasia **Plischka**
Carol **Plummer**
Kathleen **Quirk**
Birgit **Rameseder**
Shastri **Ramnath**
Berte **Simons**
Eira **Thomas**
Sarah **Thomas**
Vanessa **Torres**
Irena **Tsakova**
Anna **Tudela**
Laura **Tyler**
Fransje **Van der Marel**
Frances **Wall**
Joanne **Warner**
Anna **Wiley**
Elena **Zhavoronkova**



BOARD MEMBERS



CAROLE CABLE, CHAIR

Carole is a Partner at Brunswick Group and leads the metals and mining practice where she helps clients navigate the interconnected financial, political and social worlds to build trusted relationships with all stakeholders. She has over twenty years' experience in the mining sector in London and Australia, having previously worked as a mining equity analyst and sales person, a commodity analyst and a commercial executive for a mining company. Carole is a non-executive director of Nyrstar N.V. and City Natural Resources High Yield Trust plc.



NICHOLE MCCULLOCH, MANAGING DIRECTOR

Nichole is Managing Director of Clifton Hill Associates, a global executive search and leadership advisory firm in the energy and natural resources sector. A strong advocate for diversity and inclusion, Nichole advises clients on how to create a proactive strategy around talent and leadership both at an executive and board level. Alongside WIM, Nichole is also the Chair of BAFA, the National Governing body of American Football in the UK.



KAY ELLEN CONSOLVER, NON-EXECUTIVE DIRECTOR

Kay Ellen is an independent director in the global oil & gas, mining and power industries, advising on boardroom culture, corporate governance, global expansion, risk & reputation management and women's leadership initiatives. She serves on the Boards of Thyssen Petroleum, a privately held oil & gas company; Kumbaya, bringing solar power for connectivity & educational & health content to marginalized populations globally; and the New York Women's Forum, the founding forum of the International Women's Forum, a network of over 6,800 women leaders.



JUDITH MOSELY, WIM NON-EXECUTIVE DIRECTOR

Judith Mosely is a senior banker with over twenty years' experience in the mining and metals sector. For the last six years she has held the position of Business Development Director for Rand Merchant Bank in London with responsibility for developing the bank's African business with international mining and metals companies. She has broad experience across commodity sectors, working with juniors through to multinationals. Judith is also a non-executive director of Blackrock World Mining Trust plc and a Trustee of Earthwatch, an international environmental charity.



DALE WILLIAMS, NON-EXECUTIVE DIRECTOR

A former corporate finance banker, Dale spent over 15 years working at Royal Bank of Scotland and ANZ Bank focused on the mining, metals and the energy resource sectors. More recently Dale joined Swann Global, an international executive search firm, which works with many of the world's mining and metal groups and provides strategic advice and assistance on executive and non-executive board composition and appointment of senior technical and operational directors. Dale is also a Mentor for the 30% Club.

EXECUTIVE COMMITTEE



ALEX BUCK, ACTING HEAD OF COMMUNICATIONS

Alex has over 15 years of investor relations, corporate communications and crisis management experience in the mining industry. Alex started her career at Brunswick before joining the investor relations department at AngloGold and then co-founding BuckBias, a specialist communications consultancy, whose clients included LionOre Mining, Aquarius Platinum and Mantra Resources. Currently Head of Communications at Asanko Gold, Alex is also a Trustee of the award-winning orchestra Arcangelo.



LUCY CRANE, HEAD OF MEMBERSHIP & EDUCATION

Lucy is an exploration geologist who started her career with Altus Strategies, both in the field working on their grassroots projects and also gaining valuable insight in to the more corporate side of the mining industry. She is now a consultant in the UK, working closely with Cornish Lithium on their exploration for lithium-enriched geothermal brines in Cornwall. Lucy is a founding member of the London chapter of the Young Mining Professionals.



ELIZABETH JOHNSON, ACTING HEAD OF EVENTS

Elizabeth is a mining corporate broking specialist with over 12 years experience in the sector advising companies both listed and private across a range of commodities. Elizabeth is the founder of Pimlico Advisory, a bespoke IR and corporate development firm. Prior to this she was a Director at SP Angel, having spent six years at FinnCap building their mining franchise. Elizabeth is also on the Committee of the Association of Mining Analysts.



CALLIOPE LALOUSIS, HEAD OF PARTNERSHIPS

Calliope Lalousis is the Regional Manager for Deswik in the EMEA and CIS regions providing mine planning consulting and software to the mining industry. Calliope is a Professional Engineer with an MBA and has extensive experience on mining and metals projects. Her experience includes project evaluation modelling, project management and mine planning across projects in Australia, Canada, New Caledonia, the Middle East, Africa and Europe.



LOUISE MASON, HEAD OF EVENTS

Louise has over 10 years of City communications agency experience advising FTSE, AIM and private companies, helping them achieve strong and consistent messaging and an ability to reach all who shape corporate reputation and the regulatory environment. She combines financial public relations and investor relations expertise together with broader profile, reputation and crisis management to define and tell clients' financial stories. Louise is a member of the Chartered Institute of Public Relations.



MELINDA MOORE, HEAD OF THE INTERNATIONAL COMMITTEE AND FINANCE DIRECTOR

Melinda is the Principal of Cleanup Commodities, a commodity brains trust specialising in commodity marketing and financing. Melinda has held international commercial, investment and financing roles servicing the global steel, mining & energy industries for the past 20 years. She has worked for BHP Billiton as a commodity marketing specialist and the world's largest Bank, ICBC in commodity sales and financing. Melinda was also the first woman to trade iron ore swaps.

INTERNATIONAL COMMITTEE



Melinda Moore,
Cleanup Commodities,
International Committee Head



Deborah Caudle,
Societe Generale,
Committee Member,
Australia (Sydney)



Teo DeChev,
Mundoro Capital,
Committee Member,
North America



Hayley De Wit,
Pathway Ventures,
Committee Member,
North America



Dr Stacy Hope,
Hope Consultancy,
Committee Member,
Latin America/Africa Region



Sonya McLeod,
HR Business Partner,
Committee Member,
Australia (Perth)



Jennifer Otero Fraga,
Search Consultancy,
Committee Member,
Latin America/Africa Region



Alina Uritskaya,
Deloitte UK,
Committee Member,
Europe

Thank you to the international committee for all their hard work on this edition of the '100 Global Inspirational Women in Mining'.

THANK YOU…

WIM would like to thank its foundation partners for their support in championing diversity and advocating for women in the mining industry.













WIM would like to recognise and thank the following organisations and companies for their support and contribution to our "100 Global Inspirational Women in Mining" project:

























Photos generously supplied by:
African Rainbow Minerals, Anglo American, Antofagasta, Asanko Gold, Ero Copper, Glencore, Golden Star, Petra Diamonds, South 32, Philip Mostert

DISCLAIMERS

100 Global Inspirational Women in Mining 2018
This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, neither BMO Capital Markets nor Women In Mining (registered in the UK as a private company limited by guarantee under Company No. 06123099) nor any of their members, directors, employees or agents accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

Copyright © Women In Mining. All rights reserved.

BMO
BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (member FDIC), Bank of Montreal Ireland p.l.c, and Bank of Montreal (China) Co. Ltd and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member FINRA and SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Investment Industry Regulatory Organization of Canada and Member Canadian Investor Protection Fund) in Canada and Asia and BMO Capital Markets Limited (authorised and regulated by the Financial Conduct Authority) in Europe and Australia. "Nesbitt Burns" is a registered trademark of BMO Nesbitt Burns Inc., used under license. "BMO Capital Markets" is a trademark of Bank of Montreal, used under license. "BMO (M-Bar roundel symbol)" is a registered trademark of Bank of Montreal, used under license. ® Registered trademark of Bank of Montreal in the United States, Canada and elsewhere. ™ Trademark of Bank of Montreal in the United States and Canada.

The paper used in this document is elemental chlorine free and is FSC® accredited. It is printed to ISO 14001 environmental procedures, using vegetable based inks.



The Forest Stewardship Council® (FSC®) is an international network which promotes responsible management of the world's forests. Forest certification is combined with a system of product labelling that allows consumers to readily identify timber based products from certified sources.

GATHER

Design and production of the book by: Gather
+44 (0)20 7610 6140
www.gather.london





BMO We're here to help.™

With more than a century of service to the metals and mining sector, BMO is committed to helping the industry's next great leaders connect with opportunities for growth.

BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (member FDIC), Bank of Montreal Ireland p.l.c, and Bank of Montreal (China) Co. Ltd and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member FINRA and SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Investment Industry Regulatory Organization of Canada and Member Canadian Investor Protection Fund) in Canada and Asia and BMO Capital Markets Limited (authorised and regulated by the Financial Conduct Authority) in Europe and Australia. "Nesbitt Burns" is a registered trademark of BMO Nesbitt Burns Inc., used under license. "BMO Capital Markets" is a trademark of Bank of Montreal, used under license. "BMO (M-Bar roundel symbol)" is a registered trademark of Bank of Montreal, used under license. © Registered trademark of Bank of Montreal in the United States, Canada and elsewhere. ™ Trademark of Bank of Montreal in the United States and Canada.