

Global Insights from Lithosphere Mapping to Diamond Exploration



Lyn Takenaka

Honoring her academic mentors and pioneers in the “lithosphere mapping” concept, Professors Bill Griffin and Sue O’Reilly, Lyn brings a series of concepts and insights generated by their work group and others along 40 years of history. This talk shows how the multidisciplinary investigation of the lithosphere, mineralogy and petrology of mantle materials and geodynamics have been used for diamond exploration. It also highlights some of the most popular methodologies and tools used at both regional and local scale, especially for the prospectivity of kimberlites and other mantle-derived intrusions that might carry diamonds, including examples in Australia and worldwide.

Lynthener (Lyn) has over 10 years of experience including geosciences research in the Geological Survey of Brazil and geology/exploration consulting in SRK Australia. As a scientist she acquired extensive experience in geochemistry and geochronology including sampling, analysis, data processing and interpretation. Lyn’s double PhD in Australia and Brazil revealed the origin and composition of the Brazilian lithosphere in a complex terrain, combining a large range of techniques to provide clues for the exploration of diamonds and other mineral systems. As a consultant, Lyn has worked across several topics including prospectivity, modelling, valuation, ranking studies, field mapping and government applications for many commodities such as diamonds, nickel, uranium, gold, copper, silver, lead, zinc and more.

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