## From Data Mining to Knowledge: Refining a Precious Raw Material of the 21st Century

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Prosperity and lifestyle of our society largely rely on improved or even novel materials. The enormous amounts of research data produced every day in this field represent a gold mine of the 21st century. This resource is, however, of very limited value, if not comprehensively characterized and made available. How can we refine this feedstock and turn data into knowledge and value? FAIR – Findable, Accessible, Interoperable, Re-usable (or alternatively Findable and AI Ready) – data will change the way how science is done today. I will discuss how we approach this goal for the field of materials science.