



DEMETER Concluding Symposium

Rare-earth permanent-magnet
motors and the e-mobility
revolution

5-7 February 2019, Leuven, Belgium

Tuesday 5 Feb 2019	
12:00	Welcome reception and registration
14:00	Welcome Opening by the host
Theme	The future of REE permanent magnets (I)
14:10	<p>Keynote Presentation</p> <p>Boris Saje (Kolektor, Slovenia) Metallic Permanent Magnets over the last 35 years</p>
14:50	<p>Keynote Presentation</p> <p>David Brown (SG Technologies Ltd, UK) Nanocrystalline rare earth based magnetic materials and their applications</p>
15:30	Coffee Break
16:00	<p>Keynote Presentation</p> <p>Oliver Gutfleisch (TU Darmstadt, Germany) Heavy rare earth free, free rare earth and rare earth free magnets – vision and reality</p>
16:40	End of Tuesday sessions

Wednesday 6 Feb 2019	
Theme	The future of REE permanent magnets (II)
09:00	Keynote Presentation Mike Coey (Trinity College Dublin, Ireland) What about Nitrides?
09:40	Keynote Presentation Sophie Rivoirard (CNRS, France) High field experimentation
10:20	Coffee Break – Poster Session
10:50	Keynote Presentation Dagmar Goll (Hochschule Aalen, Germany) New permanent magnet phases
11:30	Intensified Poster Presentation Session
12:00	Lunch
Theme	The future of (H)EVs
13:30	Keynote Presentation Steve Hope & Ronny Denis (Toyota Motor Europe, Belgium) Recycling opportunities & challenges: Toyota’s long-term vision on electrified vehicles
14:15	Keynote Presentation Bert Witkamp (VALUAD, The Netherlands) Future EV supply chains: demand growth and impact on critical raw materials
15:00	Coffee Break
15:30	Keynote Presentation Jose Ramon Garcia Santamaria (Automotive consultant NuMobility, Switzerland) Mobility Responsibilities: Policy Makers, Auto Industry & Rare Earths
16:15	Keynote Presentation Fabrice Stassin (Umicore, Belgium)
17:00	Panel Debate : REEs and the future of (H)EVs Irena Skulj (Kolektor), Jose Ramon Garcia Santamaria (Automotive consultant NuMobility), Bert Witkamp (VALUAD)
18:00	End of Wednesday sessions

Thursday 7 Feb 2019	
Theme	Recycling of REE permanent magnets
09:00	Keynote Presentation Allan Walton (University of Birmingham, UK) Direct recycling routes for EoL magnets
09:40	Keynote Presentation Koen Binnemans (KU Leuven, Belgium) Is REE recycling the solution for the balance problem?
10:20	Martina Orefice (KU Leuven, Belgium) – ESR ETN DEMETER Recovery of metal values from SmCo and NdFeB magnets by iono-metallurgical methods
10:35	Awais Ikram (JSI, Slovenia) – ESR ETN DEMETER The pulsed electric current sintering and grain boundary modification of the recycled HDDR Nd-Fe-B powders
10:50	Coffee Break
11:15	Xuan Xu (JSI, Slovenia) – ESR ETN DEMETER Recycling of Nd-Fe-B scrap/EOL magnets through electrolytic methods
11:30	Muhammad Awais (University of Birmingham, UK) – ESR ETN DEMETER Extraction and reprocessing of NdFeB magnets from end of life hybrid/electric vehicles
11:45	Mehmood Farhan (JSI, Slovenia) – ESR ETN DEMETER Microstructure evolution in recycled HDDR NdFeB magnets
12:00	Gwendolyn Bailey (KU Leuven, Belgium) – ESR ETN DEMETER Life Cycle Assessment of new recycling and re-use routes for REE-magnet machines in (H)EVs
12:15	Lunch
Theme	Are REEs still critical?
13:30	Keynote Presentation Gareth Hatch (Strategic Materials Advisors Ltd., UK) REE market developments
14:10	Keynote Presentation Milan Grohol (EC, DG GROW, Belgium) (pending final confirmation) The EC's perspective on Rare Earths
14:50	Keynote Presentation Dan Packey (Curtain University, Australia) Rare Earths Supply Today: Lacking Diversity for Long Term Sustainability
15:30	Coffee Break
16:00	Panel Debate: Are REEs still critical? Gareth Hatch (Strategic Materials Advisors Ltd., UK), Dan Packey (Curtin University, Australia), Milan Grohol (EC, DG GROW, Belgium), Gwendolyn Bailey (KU Leuven, Belgium)
17:00	Closing session