

SEMINARIO

Sala A, 1° Piano, CNR-IMEM, Parma | 23 gennaio 2024 | ore 15:00

Foreword

During the year 2023 IMEM and TEC established a scientific collaboration on the topic of magnetocaloric refrigeration: we studied the fundamentals of magnetic heat pumps through finite elements simulations of electromagnetic interactions and fluid-solid heat transfer phenomena. We are putting into practice our joint studies through the development of a prototype of magnetic refrigerator.

Short intro: the IMEM-TEC collaboration on magnetocalorics (S. Fabbri, IMEM)

Presentation of TEC, Technological Institute of Costa Rica



PROGRAM

- *About TEC, Technological Institute of Costa Rica,*
Dott.ssa. Marcela Meneses Guzman (Professor, School of Industrial Production Engineering)

OUR RESEARCH ACTIVITIES

- *Profile monitoring, application for cellular materials*
Dott.ssa. Marcela Meneses Guzman
- *Biotronics, sustainable devices for energy and information*
Dott.sa. Claudia Chaves Villareal (Professor, School of Materials Engineering)
- *Application of computational modelling: EMI (Electro-Magnetic Interference) shielding; stress in magnetocaloric materials; magnetic refrigeration*
Master Francisco Rodriguez Mendez (PhD Candidate, School of Materials Engineering)
- *Application of Computational Fluid Dynamics (CFD): plasma; flow and heat transfer in porous materials*
Dott. Bruno Chiné (Professor, School of Materials Engineering)

Parco Area delle Scienze 37/A - 43124 Parma Tel: +39 0521 269100

Sede Genova: c/o Dipartimento di Fisica, Università; Via Dodecaneso 33 - 16146 Genova Tel: +39 010 3536246

Sede Trento: c/o Fondazione Bruno Kessler; Via alla Cascata 56/C, Povo - 38123 Trento Tel: +39 0461 314878

PEC: protocollo.imem@pec.cnr.it

www.imem.cnr.it