

3rd Franco-Indian Workshop on Nanocomposites

Applications to energy harvesting and sensors

Monday 13th December 2021, Room A-3-012, IJL, Nancy

Tuesday am 14th December 2021, Room A-2-012, IJL, Nancy

Monday am 13th of December 2021

Room A-3-012, IJL, Nancy

8h30 Welcome – coffee

8h55 Opening by Pr **Didier Rouxel** and Pr **Isabelle Royaud** – Institut Jean Lamour, Université de Lorraine

9h00 Pr **Sabu Thomas** – Vice-Chancellor (Président) of Mahatma Gandhi University, Kerala, India, Director-in-charge -International and Inter University Centre for Nanoscience and Nanotechnology and Director, School of Energy Materials, Mahatma Gandhi University,

"Elastomer Nanocomposite Sensors in Flexible Electronics"- Webinar.

9h45 Pr **Bruno Améduri**, Institut Charles Gerhardt Montpellier, ENSCM, Université de Montpellier,

"New PVDF and VDF Copolymers as Unique Electroactive Materials"

10h30 Coffee break

11h Pr **Nandakumar Kalarikkal** – Professor IIUCNN & Director-In-Charge, School of Nanoscience and Nanotechnology & Professor, School of Pure and Applied Physics, Mahatma Gandhi University, Kerala, India.

"Engineered Polymer Nanocomposites for Tailored Applications"

11h45 Pr **Frédéric Sarry**– Institut Jean Lamour, Université de Lorraine,

"Surface acoustic wave devices dedicated to biological applications"

Monday pm 13th of December 2021

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12h30-14h30 Lunch time break

14h30 Pr **Mohammad Reza SAEB** – Gdansk University of Technology, Pologne,

"Microstructure-Properties-Performance Interrelationships in Polymer Nanocomposites"

15h15 Pr **Didier Rouxel** – Institut Jean Lamour, Université de Lorraine

"Hybrid Composites with Shape Memory Alloys and Piezoelectric Thin Layers for Energy Harvesting"

16h00 Coffee break

16h30 Pr **Isabelle Royaud** – Institut Jean Lamour, Université de Lorraine

"Study of MWS relaxation in isotactic crosslinked polypropylene-g-maleic anhydride filled with graphite functionalized or not by Dynamic Dielectric Spectroscopy"

17h15 **Maïté Fernandes-Tronco** – Institut Jean Lamour, Université de Lorraine

"Development of electrospun PVDF piezoelectric generators: a review"

18h End of the day

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Tuesday am 14th of December 2021

Room A-2-012, IJL, Nancy

8h30 Welcome – coffee

9h00 Pr **Tarak Ben Zineb** – LEMTA, Université de Lorraine

"Numerical Modelling of Hybrid Composites with Shape Memory Alloys and Piezoelectric Thin Layers"

9h45 Dr **Sathiyathan P** – International and Inter University Centre for Nanoscience and Nanotechnology and Professor in School of Chemical Sciences, Mahatma Gandhi University, Kerala, India

"Polymer-Based Flexible Piezoelectric Sensors For Energy Harvesting And Physiological Signal Monitoring Applications"- Webinar.

10h30 Coffee break

11h **Sreelakshmi MP** – International and Inter University Centre for Nanoscience and Nanotechnology and Professor in School of Chemical Sciences, Mahatma Gandhi University, Kerala, India

"Electrospun PVDF Nanofibers"- Webinar.

11h45 Conclusion- Final words by Prof. **Kalarikkal** and Prof. **Thomas**.

12h End of the Workshop