

Curriculum Vitae

Leonard Deepak Francis

Research Group Leader – Nanostructured Materials

<http://inl.int/advanced-electron-microscopy/nanostructured-materials/>

Department of Advanced Electron Microscopy, Imaging and Spectroscopy (AEMIS)

International Iberian Nanotechnology Laboratory

Av. Mestre José Veiga s/n

4715-330 Braga - Portugal

Ph: 351 253 140 112 – (2160)

Email: leonard.francis@inl.int

Nationality: Indian

Language proficiency:

English (proficient), German (proficient), Hebrew (basic), Portuguese (intermediate), French (basic),
Tamil (mother tongue)

Professional and Academic Background

1995-1998	B. Sc. (Chemistry) Loyola College, Chennai, India.
1998-2000	M. Sc. (Chemistry) Loyola College, Chennai, India.
2000-2005	PhD (Prof. C. N. R. Rao, F.R.S., Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India)
Aug 2005- Dec 2005	Research Fellow (Prof. C. N. R. Rao, F.R.S., Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India)

2006-2008	Postdoctoral Fellow (Prof. Reshef Tenne, Weizmann Institute of Science, Fellowship from Feinberg Graduate School and Prof. Reshef Tenne)
2009-2011	Postdoctoral Fellow (International Iberian Nanotechnology Laboratory (INL), Braga, Portugal working with Prof. Miguel Jose Yacamán, University of Texas at San Antonio, U.S.A)
2011-2013	Fellow , International Iberian Nanotechnology Laboratory (INL)
2013-2016	Staff Researcher , International Iberian Nanotechnology Laboratory (INL)
2016-present	Research Group Leader – Nanostructured Materials , International Iberian Nanotechnology Laboratory (INL)

RESEARCH HIGHLIGHTS

- >100 publications
- 8 reviews in major international journals.
- 5 Conference Proceedings
- 1 Editorial
- 3 Book Chapters.
- 2 Books (Edited Work).
- 1 Journal Special Issue (Edited Work)
- 3 Patents and 1 Ongoing
- h-index – 26.
- 1 Master's Thesis Supervision.
- **Referee** for ACS, RSC and Elsevier journals.
- **Guest Editor** for a special issue of the Journal of Nano Materials (Hindawi Publishing Corporation), issue entitled, Nanomaterial Properties: Size and Shape Dependencies (2012).
- **Editorial Board and Reviewer Board:** International Journal of Nanomaterials, Nanotechnology and Nanomedicine (<https://www.peertechz.com/journals/international-journal-of-nanomaterials-nanotechnology-and-nanomedicine/editorial-board>)
- **Editorial Board Member:** Journal of Nanoscience and Nanomedicine (<https://www.pulsus.com/journal-nanoscience-nanomedicine/editorial-board.html>)
- **Editorial Board Member:** Nanoscience and Nanometrology (<http://www.sciencepublishinggroup.com/journal/editorialboard?journalid=356>)
- **Editorial Board Member:** Madridge Journal of Nanotechnology & Nanoscience (MJNN) (<https://madridge.org/journal-of-nanotechnology-and-nanoscience/editors>)
- **Editorial Board Member:** American Research Journal of Nanotechnology (ARJNT) (<https://www.arjonline.org/american-research-journal-of-nanotechnology/editorial-board>)

- **Editorial Board Member:** International Journal of Materials Science (http://helicsgroup.net/journal/journal_info/MaterialsScientificNetworks/23)
- **Symposium Co-Organizer:** Symposium 5, Electron Microscopy of Materials, XXII International Materials Research Congress, Cancun, Mexico, Aug 11 - 15, 2013.
- **Electron Microscopy School Co-Organizer:** Transmission and Scanning Electron Microscopy Course, Mar 20-24, 2017, International Iberian Nanotechnology Laboratory, Braga, Portugal (<https://www.electronmicroscopycourse.com/>)
- **Organizer: School in Advanced Electron Microscopy** Satellite Event of Materials 2017, Apr 09, 2017, University of Aveiro (<http://materiais2017.web.ua.pt/index.htm>)
- **Co-Organizer:** “Latest advances in electron microscopy instrumentation in life sciences and materials science” - INL-Thermo Fischer, June 13, 2017, International Iberian Nanotechnology Laboratory.
- **Co-Organizer:** Workshop on Latest Advances in Cryo-Electron Microscopy Instrumentation for Life Sciences, INL-JEOL Europe-Gatan, July 17, 2017, International Iberian Nanotechnology Laboratory.
- **Co-Organizer:** International Workshop on Electron Microscopy - May 4th, 2018 (<http://electron-microscopy.inl.int/workshop-electron-microscopy-2018/>), International Iberian Nanotechnology Laboratory.
- **Co-Organizer:** INL-JNCASR Workshop on Nanotechnology, Oct 17, 2018.
- **Session Chair:** 3rd World Congress on Materials Science and Engineering, Barcelona, Aug 24-26, 2017.
- **Session Co-Chair:** Materials Science Session, Microscopy at the Frontiers of Science, Zaragoza, Sep 5-8, 2017.
- **Scientific Committee:** Advanced Nanomaterials Conference (ANM-2017 and ANM – 2018) (<http://www.advanced-nanomaterials-conference.com/committees/>)
- **Invited Talks** -13, **Guest Lecture** – 2, **Tutorial Lectures** – 2, **Oral Contributions** – 16, **Poster Presentations** – 20.

Awards and Fellowships

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| 1999-2000 | Summer Research Fellow in JNCASR |
| 2000 | Summer research Fellow award. |

Fellowship from Feinberg Graduate School, Weizmann Institute of Science 2006-2008.

Selected as **Outstanding Scientist Worldwide for 2007** from the **International Biographical Centre of Cambridge, England.**

Selected as **Marquis Who's Who of Emerging Leaders, 2007 Edition and Marquis Who's Who in Asia, 2007 Edition.**

Selected as **Marquis Who's Who in Science and Engineering, 2007 Edition.**

IEEE Prize from Israel Vacuum Society conference

(Poster - Fullerene-Like (IF) $Nb_xMo_{1-x}S_2$ Nanoparticles)

26th Annual Israel Vacuum Society meeting, Israel Air Force House, Herzliya

European Projects

- NANOHVAC (Novel Nano-enabled Energy Efficient and Safe HVAC ducts and systems contributing to a healthier indoor environment)
- NANoReg (A common European approach to the regulatory testing of nanomaterials)

Regional Projects

- Self-assembled functionalized nanomaterials for biomolecular recognition (BSELF) Call: SAESCTN-PIIC&DT/1/2011.
- Fate and Effect of Engineered Nanoparticles in Wastewater Treatment Plants (WATERNANOENV), Axencia Galega de Innovación (GAIN)-ERDF
- N2020. Nanotechnology based functional solutions (NORTE-45-2015-02). Duration: 2016-2020

National Projects

- Correlated Analysis of Inorganic Solar Cells in and outside an Electron Microscope (CASOLEM – 028917), Funding Program: FCT and the ERDF through COMPETE2020
- FLASH sintering of lead free functional oxides towards sustainable processing of materials for energy and related applications (FLASH), Funding Program: FCT and the ERDF through COMPETE2020
- Two dimensional magnetic semiconductors (2DMS), Funding Program: FCT-UT Austin
- REEs-free high-performance permanent magnets based on exchange-spring and high anisotropy phases (CritMag), Funding Program: FCT and the ERDF through COMPETE2020

➤ Collaborative Laboratory NET4CO2 (COLAB), Funding Program: PT2020