Krishna Chytanya Chinnam

OBJECTIVE

A self driven Post-Doctoral candidate with extensive experience in electrospinning of **Piezo polymers.**

RESEARCH EXPERIENCE

Post-Doctoral Researcher

Roma Tre University, Oct 2016 - July 2021

Engineered Polymeric Piezo Sensors and Transducers for morphing applications . Project funded by European Research council and US Airforce. Carried out research activities on vibration & acoustic sensing using PVDF single-nanofiber / nanofiber-membrane. Actuation of PVDF single-nanofiber / nanofiber membrane to study the acoustic properties and actuation capabilities of the electrospun nanofibers.

Organic Thin-Film Transistors : May 2010 - Nov 2014
Doctoral Researcher within Plastic Electronics group at University of Strathclyde, carried out research towards developing low-voltage thin film transistors with ultra-thin dielectric for flexible display applications.

Capacitive Sensors : May 2007 - May 2008 Chalmers University
Worked on an EU 'Intellisense RFID' project within a multi-disciplinary Microelectronics Research group at Imego, Sweden, carried out research towards developing polymeric capacitive Sensors.

EDUCATION

PhD in Plastic Electronics

University of Strathclyde May 2010 - Nov 2014

- Organic Semiconductor technology: Modules in Micro and Nanotechnology.
- Dissertation: Aluminum oxide prepared by UV / ozone exposure for **low-voltage Thin film Transistors** .

MSc in Molecular Electronics

Linkoping University Sep 2005 - Mar 2009

- Electronics and System Design : Modules in Semiconductor technology, Organic electronics, Molecular electronics and System designing and project management. Dissertation: Capacitive pH sensors using pH sensitive polymer.

Bachelors in Electronics Engineering

Chaitanya Bharathi Institute of Technology, India Jun 2000 - May 2004

- Power Electronics , Modules in Circuit theory, Semiconductor technology, Electromagnetics, etc.
- Dissertation: 8085 Microprocessor controlled DC motor.

TECHNICAL SKILLS

Electrospinning, **Laser Doppler Vibrometry**, **DMA**, **FTIR, SEM, AFM**, **3d Printing**, optical microscopy, Kurt J Lesker Minispectros Metal deposition, **Lithography** , UV / ozone cleaners, **Agilent B1500A semiconductor parameter analyzer, Dektak profilometer**, MATLAB, Kaleidograph, Origin, MS Word, Excel, etc.

AWARDS & HONOURS

- **Best Poster Award :** 10th International Union of Vacuum Science Nanophysics conference, Jun 2011.
- Recipient of fully funded PhD Scholarship: Glasgow Research Partnership for engineering, 2010-2014.

PUBLICATIONS & PRESENTATIONS

- NODYCON **Non-Linear Dynamics** , Conference Proceedings, 2021, Electrospun PVDF fiber mat acoustic speakers .
- NODYCON **Non-Linear Dynamics** , Conference Proceedings, 2021, Electrospun PVDF fiber mat acoustic sensors .
- ASME SMASIS, Conference Proceedings 2019, **AC actuation** of PVDF-Magnetide Single fibers.
- NODYCON **Non-Linear Dynamics** , Conference Proceedings, 2019, **AC actuation** of PVDF Single fibers.
- ASME SMASIS Conference Proceedings 2018, Electrospun PVDF Actuators.
- ASME SMASIS Conference Proceedings 2018, Strain Sensing of Prosthetics.
- ICEM Conference Proceedings Brussels 2018, Electrospun PVDF Sensors.
- TechConnect Conference 2018, Proceedings, Strain Sensing using CNT Composites.
- **Patent** : Methods for **forming an organic layer** on a substrate Feb 2013.
- Journal of Nanoscience & Nanotechnology May 2012, Heat Treatment of AlOx with organic SAM by UV / Ozone for **OTFT's** .
- Journal of Non-Crystalline solids Feb 2011, AlOx by UV / Ozone oxidation and organic **SAM's for OTFT's** .
- EMRS, Strasbourg, May 2012, AlOx by UV / Ozone oxidation for **low voltage OTFT's**
- 10th International Union of Vacuum Science on Physics at Nanoscale, Jun 2011, AlOx by UV / Ozone oxidation.

IN PIPELINE

Patent application on electrospun **Piezoelectric acoustic transducers** 2021.
Journal paper on electrospun **Piezoelectric Speakers 2021.**

REFERENCES

- Dr. Giulia Lanzara - giulia.lanzara@uniroma3.it, Roma Tre University, Rome, Italy.
- Dr. Helena Gleskova - helena.gleskova@strath.ac.uk +44 (0) 141 548-2061, University of Strathclyde.
- Prof. Ivan Andonovic - i.andonovic@eee.strath.ac.uk +44 (0) 141 548 2537, University of Strathclyde.
- Dr. Dag Ilver - dag.ilver@imego.se +46 (0) 70 915 18 37, Imego Ab, Göteborg, Sweden.
- Prof. Mats Fahlman mats.fahlman@ liu.se, +46 13 28 12 06, Linkoping University, Sweden