**INVENTION-PATENT**

1. Ashritha Salian, Saumen Mandal, “*A method of preparing low temperature stabilized high entropy high-k oxides”*, “**Indian Patent**”, Application Number 202141035822 dated 09/08/2021. (Filed)
2. Saumen Mandal, Dipti Gupta, Komalakrushna Hadagalli, Pavan Pujar, Shakya Kaushal Rajendraprasad, *“Method and system for fabricating a porous ceramic structure using combustible pore former*”, “**Indian Patent**”, Application Number 201841033533 dated 06/09/2018. (Filed)
3. Saumen Mandal, Bikesh Gupta, Pavan Pujar, Komala Krishna Hadagalli, Robbi Vivek Vardhan, “*Fabrication of High Conductive Metallic Films at Low Temperature”,* **Indian Patent 347677**, 24 September, 2020.(**Granted**)

**SPONSORED RESEARCH PROJECTS**

(1) Project Title: Prawn shell-derived natural protein-based highly efficient UV protection coating for drug products.

PI: Dr Saumen Mandal

Co-PIs: Dr Saikat Dutta

Funding Agency: “Core Research Grant” from SCIENCE & ENGINEERING RESEARCH BOARD (SERB), Amount: 35.2 Lakhs (February, 2022 – February, 2025)

(2) Project Title: Academia-industry outreach program on conventional and advanced ceramic manufacturing for the next generation of ceramics and glass engineers.

PI: Prof. Bikramjit Basu

Co-PIs: Prof. B. V. Manoj Kumar, Dr. Uttam K. Ghorai, Dr. Saumen Mandal, Mr. Sabyasachi Roy, Dr. Debdutt Patro, Mr. N. M. Dube

Funding Agency: “The Ceramic and Glass Industry Foundation, The American Ceramic Society”, Amount: 11000USD (November, 2018 – November, 2019)

(3) Project Title: All solution processed transparent low temperature synthesized Indium Zinc Tin Oxide based high performances thin film transistors for active matrix displays.

PI: Dr Saumen Mandal

Funding Agency: “Early Career Research Award” from SCIENCE & ENGINEERING RESEARCH BOARD (SERB), Amount: 21 Lakhs (December, 2016 – December, 2019)

Total number of publications: 41

**PROFESSIONAL AFFILIATION:**

Associate member of “Indian Institute of Ceramics”,

Life member of “Indian Ceramic Society”,

“Electron Microscope Society of India”,

“Indian Institute of Metal” and

“The Institute of Engineers (India)”

**B.Tech. PUBLICATION: JOURNAL PAPER**

1. Abhishesh Pal, Komalakrushna Hadagalli, **Poorvi Bhat, Vishesh Goel**, Saumen Mandal, *“Hydroxyapatite - A promising sunscreen filter”*, **Journal of the Australian Ceramic Society**, 56 (2020) 345–351.
2. G Manjunath, Robbi Vivek Vardhan, Ashritha Salian, **Rashi Jagannatha, Mayank Kedia** and Saumen Mandal, *“Effect of annealing temperature assisted phase evolution on conductivity of solution combustion processed calcium vanadium oxide electrodes”*, **Bulletin of Materials Science** 41 (2018) 126.