

## **FACULTY PROFILE**

**TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE COLLEGE**

**(M) KAMAREDDY**

**DEPARTMENT OF PHYSICS**



**Name: Dr. APPANI SHRAVAN KUMAR**

**Academic Qualifications: M.Sc. Ph.D.**

### **RESEARCH AND TEACHING EXPERIENCE**

**(Total Teaching experience: 2.5 years)**

- Presently working as Degree Lecturer at Telangana Tribal Welfare Residential Degree College TTWRDC (M) Kamareddy, under the Government of Telangana from Aug 01<sup>st</sup> 2024.
- Worked as a Postdoctoral Research Fellow at Ca' Foscari University of Venice, Italy from Jan 15<sup>th</sup> 2024 to Dec 31<sup>st</sup> 2024.
- Worked as a Postdoctoral Research Fellow at CNR-IOM, Trieste, Italy from August 29<sup>th</sup> 2022 to Jan 14<sup>th</sup> 2024.
- Worked as a Lecturer in RGUKT Basar Senior, under the Government of Telangana from June 12<sup>th</sup> 2012 to Aug 01<sup>st</sup> 2014.

### **PUBLICATIONS**

#### **Research Articles**

- **Shravan K. Appani**, M. Monish, R. Nandi, D. Singh, and S.S. Major, “*The microstructural evolution of sputtered ZnO epitaxial films to stress relaxed nanorods*”, Thin solid films 782, 140039 (2023).
- **Shravan K. Appani**, D. Singh. R. Nandi, D.S. Sutar, and S.S. Major, “*Influence of oxygen partial pressure on the strain behaviour of reactively co-sputtered Ga doped*”

*ZnO thin films*”, Thin Solid Films 764, 139624 (2023).

- **Shravan K. Appani**, Ashok Kumar Yadav, D. S. Sutar, S. N. Jha, D. Bhattacharyya and S. S. Major, “*X-ray absorption spectroscopy study of Ga-doping in reactively sputtered ZnO films*”, Thin Solid Films 701, 137966 (2020).
- Praloy mondal, **Shravan K. Appani**, D. S. Sutar, and S. S. Major, “*High performance GZO/p-Si heterojunction diodes fabricated by reactive co-sputtering of Zn and GaAs through the control of GZO layer thickness*”, RSC Adv. 11, 19779 (2021).
- Praloy mondal, **Shravan K. Appani**, D. S. Sutar, and S. S. Major, “*Effect of oxygen partial pressure on the behavior of Ga-doped ZnO/p-Si heterojunction diodes fabricated by reactive sputtering*”, J. Mater. Sci: Mater. Electron. 32, 4248 (2021).
- R. Nandi, **Shravan K. Appani (Equal authorship)**, and S. S. Major, “*High resolution X-ray diffraction studies of epitaxial ZnO nanorods grown by reactive sputtering*”, J. Appl. Phys. 121, 215306 (2017).
- R. Nandi, **Shravan K. Appani**, and S. S. Major, “*Vertically aligned ZnO nanorods of high crystalline and optical quality grown by dc reactive sputtering*”, Mater. Res. Express. 3, 095009 (2016).
- D. S. Sutar, Nirvikar Kushwaha, **Shravan K. Appani**, S. S. Major, “*Energy level alignment of graphene oxide and its derivatives with ZnO*”, J. Electron Spectrosc. 243, 146953 (2020).
- **Shravan K. Appani**, Samanth V. Rayapati, D. S. Sutar and S. S. Major, “*Study of Transparent Conducting Ga-doped ZnO Films Grown by Reactive Co-sputtering of Zn and GaAs*”, AIP Proceedings, 1942, 120009 (2018).

#### PRESENTATIONS (ORAL/POSTER) AT INTER NATIONAL CONFERENCES

- **Shravan K. Appani**, Samanth V. Rayapati and S.S. Major, “Electrical and optical studies of Ga-doped ZnO films grown by reactive co-sputtering of Zn and GaAs” presented (poster) at 34th International Conference on the Physics of Semiconductor (ICPS), Montpellier, France (2018).
- **Shravan K. Appani**, Samanth V. Rayapati, D.S. Sutar and S.S. Major, “Study of Transparent Conducting Ga-doped ZnO Films Grown by Reactive Co-sputtering of Zn and GaAs” presented (oral and poster) at 62nd DAE Solid state symposium, BARC Mumbai (2017).

#### AWARDS/SCHOLARSHIPS/MERITS

- **Secured Junior Research Fellow in CSIR Junior Research Fellowship-National Eligibility Test (CSIR-JRF-NET)** in 2012, 2014 and 2015. A national open competitive entrance exam organized by CSIR and University Grant Commission (UGC) together for graduate fellowship for the period of 5 years to pursue graduate (Ph. D) studies in India.