

Patent
Department of Chemical Engineering

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1. **BiswajitMandal**, SaptarshiMitra, AvijitGhosh, AniruddhaHore, **Tapas Kumar Manna**, **A patent applied** on “A Portable Hydrogen Gas Generator Using Spent Aluminium to Produce Hydrogen Gas on Demand” Patent Application No. 202431050150 dated 01.07.2024, (Ref no.: 5289/ASA/PP-4072/HIT-(AS-SM), in India.
2. ArunangshuGiri, WendrilaBiswas, DipanwitaChakrabarty, ShambaChatterjee, **TanushreeGhosh**, **Patent granted** on “Customer Experience Monitoring Wireless Device”, Patent No. 434951-001, 09.12.2024, (Ref.: 186780), From Intellectual Property India (GOV. of India).
3. GourabChatterjee, PriyankaSaha, AchintyaSaha, **Asit Kumar Saha**, Anjan Mishra, **Patent published** on “Barnyard millet based ready-to-eat (rte) fiber enriched khichdi premix enriched with black cumin seed oil”. Application No.202431076490A, Publication Date : 29/11/2024.
4. **Deepak Kumar Samal**, Shakti PrasannaKhadanga, **AnkitaMazumder**, **Patent published** on “Self-Rotating Liquid Distributing Stirrer (SRLDS), Application No.:202531049092, Date of Publication: 30/05/2025,(The Patent Office Journal No. 22/2025), published an ordinary patent.
5. **Sunil BaranKuila&BiswajitMandal**, **Patent granted** on “A new Polymeric IPN Membrane for Regenerative Fuel Cell, Fuel Cell and Pervaporative Separation”, Patent No. 561021, Date of Grant: 24.02.2025, From Intellectual Property India (GOV. of India).
6. **SomakJyotiSahu**, **AmaleshSirkar**, **SebakRanjan Roy**, **Patent published** on “A Novel Fermentor System for Manufacture of Ethanol from Glucose”, Application No.202531007426, date 29.01.2025, Publication Date: 07.03.2025, From Intellectual Property India (GOV. of India).
7. ArunangshuGiri, WendrilaBiswas, Anjan Mishra, ShambaChatterjee, **TanushreeGhosh**, **Patent granted** on “Emotion Recognition Interactive Billboard”, Patent No. 450618-001, 12.06.2025, (Ref : 201999), from Intellectual Property India (GOV. of India).
8. GourabChatterjee, ShamamaKhurshid, Anjan Mishra, **Asit Kumar Saha**, AchintyaSaha, **patent published** “Novel Method for Extraction of Thymoquinone-Rich Black Cumin Seed Oil Using Supercritical CO₂ Technology”, Patent Application No.202531048100 A 20/06/2025, The Patent Office Journal No. 25/2025 published Date: 20/06/2025.
9. **AditiSinha**, Parameshwari, NamalaVijaylaxmi, PoojaVerma, DeependraPandey, Dr. PayelPatil, Patent granted on “Aesthetic interactive switch panel design for smart homes” Design No. 448115-001,(Patent office journal no. 24/2025 Dated 13/06/2025), Patent office, Government of India.

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1. **BiswajitMandal**, Copyright granted on “Smart portable indoor plant growth chamber for healthy air and cooling effect” on dated 21/11/2024.
2. Swarnajit Bhattacharya,**BiswajitMandal**, AshimHalder Copyright granted on “Computer software work, a python code for DSO”, registration number SW-20167/2025.