

Patents filed in last 3 years (2018-19, 2019-20 & 2020-21)

1. Indian Patent Application No.: 201811020003, filed on 29.05.2018
Bicyclic compounds as topoisomerase I inhibitors, by Dr. Benubrata Das et al.
2. Indian Patent Application No.: 201631044988, Publication Date : 06.07.2018.
Supramolecular metallo-cage as a flocculent, by Prof. Pradyut Ghosh et al.
3. Indian patent Application No. 201841046880 filed on 11.12.2018.
A kit for specific on-field detection of Spilosoma obliqua Nucleo-polyhedrovirus, by Prof. Santanu Bhattacharya et al.
4. International Patent Application No. PCT/IN2018/050751 dt. 14.11.2018
(Indian Patent Application No. 201741040904)
A kit for specific detection of SLNPV by Prof. Santanu Bhattacharya et al.
5. Indian Patent Application No. 201931023454 filed on 13.06.2019.
Diagnostic Probe, its preparation process, Method and Kit for Quantification of Serum Albumin in Bio-fluids, by Prof. Santanu Bhattacharya et al.
6. Indian Patent Application No. 201931017619, filed on 02.05.2019.
Transparent and flexible nanostructured Wire Networks with Seamless junctions for Photo detector Applications, by Prof. Somobrata Acharya et al.
7. Indian Patent Application No. 201931022033 filed on 03.06.2019.
Development of a laser assisted long path liquid core optical guide (LLOG) for ultra-sensitive absorbance measurements, by Prof. Tapas Chakraborty et al.
8. Indian Patent Application No. 201931044056 filed on 31.10.2019, published on 07/05/2021
Synthesis of Fmoc-protected morpholino monomers and their use in the synthesis of morpholino oligomer by Prof. Surajit Sinha et al.
9. Indian Patent Application No. 201931030030 filed on 25.07.2019.
Non-canonical di-thiol based amino acid comprising at least one 2,3-/ 3,4-dimercapto-phenylalanines, method of synthesis and incorporation into peptides by Prof. Surajit Sinha et al.
10. Indian Patent Application No. 202041019648 filed in 2020.
A self-assembled nano-architecture by Prof. Santanu Bhattacharya et al.

11. International Patent Application No.:PCT/IN2019/050410 filed on 24.05.2019, filed on 29.05.2018
Bicyclic topoisomerase I inhibiting compounds, process for preparation and use thereof, by Dr. Benubrata Das et al.
12. US Patent Application No. 17/085201 filed on 30.10.2020
Synthesis of Fmoc protected morpholino monomers and their uses in synthesis of morpholino oligomer by Prof. Surajit Sinha et al.
13. Indian Patent Application No. 201931025092 filed on 24.06.2019
Nucleoside hydrogels with anti-bacterial properties by Prof. Jyotirmayee Dash et al.
14. International Patent Application No. PCT/IB2018/058661 filed on 05.11.2018.
Compounds, preparation of compounds and application thereof by Prof. Jyotirmayee Dash et al.
15. Indian Patent Application No. 202031048853 filed on 09.11.2020.
By Prof. Santanu Bhattacharya et al.
TRIBOELECTRIC MASK SYSTEM WITH VIRUCIDAL PROPERTY FOR PERSONAL PROTECTIVE EQUIPMENT(PPE)
16. Indian Patent Application No. 201911030012 filed on 25.07.2019
Cost effective, flexible and efficient paper-based artificial leaf for photo-electrochemical water splitting by Dr. Praveen Kumar et al.
17. Indian Patent Publication No. 20/2019 dated 17.05.2019 (Application No. 201741040678)
IGT conjugated antisense oligonucleotides for inducing exon skipping in duchenne muscular dystrophy by Prof. Surajit Sinha et al.
18. Indian Patent publication No. 15/2019 dated 12.04.2019 (Application No. 201731036178)
A method for manufacturing visible transparent conducting material by Prof. Durga Basak et al.
19. US Patent application No. 20190002408 dated 03.01.2019
Oligo-guanidines based cellular transporter comprising heterocyclic rings with hydrophobic and/or lipophilic groups at n-terminal for effective delivery of nonpenetrable cargos in-vitro and in-vivo by prof. surajit sinha et al.
20. Indian Patent Application No. 202031000705 dated 07.01.2020

Diaguanosine derivatives as synthetic membrane channels for drug delivery applications by Prof. Jyotirmayee Dash et al.

Patent obtained in last 3 years (2018-19, 2019-20 & 2020-21)

1. US Patent No. 9,914,745B2 dt. 13.03.2018
Morpholino based antisense agent by Prof. Surajit Sinha et al.
2. Indian Patent No. 317597 dt. 05.08.2019.
Graphene oxide doped polyaniline nanotubes by Prof. Sudip Malik et al.
3. Indian Patent No. 316110 dt. 16.07.2019
New method for permanent removal of arsenic (III) from contaminated water by Prof. Sugata Ray et al.
4. Indian Patent No. 315405 dt. 02.07.2019
Method of instantaneous 2-line ferrihydrite synthesis in situ using layered hydroxides and its consequent use in removing arsenic and other contaminants from ground water and industrial waste water by Prof. Sugata Ray et al.
5. Indian Patent No. 329793 dated 21.01.2020
Supramolecular metallo-cage as a flocculent, by Prof. Pradyut Ghosh et al.
6. US Patent No. 10,919,857 dated 16.02.2021
Oligo-guanidines based cellular transporter comprising heterocyclic rings with hydrophobic and/or lipophilic groups at N-terminal for effective delivery of nonpenetrable cargos in-vitro and in-vivo by Prof. Surajit Sinha et al.
7. Indian Patent No. 370710 dated 30.06.2021
Peptidomimetic ligands regulate BCL-2 expression by stabilizing DNA secondary structures by Prof. J Dash et al.

Patents list for 2021-22

Patents filed:

1. Indian Patent Application No. 202132029281 with filing date 28.06.2021
Compounds, preparation of compounds and application thereof by J Dash et al.
2. Indian Patent Application No. 202131051578 with filing date 10.11.2021
A facile pH-controlled high yield and room temperature synthesis process for two-dimensional transition metal dichalcogenides by Dr. Praveen Kumar et al.
3. Indian Patent Application No. 202131060676 with filing date 24.12.2021
Polyhedral CsPbBr₃ Nanocrystals and its method of synthesis using α -Bromo Ketone as Halide Precursor by Professor N Pradhan et al.

Patent granted:

1. Indian Patent No. 366635 dated 13.05.2021
Solution processed freestanding two-dimensional ultra-thin binary pbs nanocrystals for efficient and highly stable dielectric applications by Prof. S Acharya et al.
2. Indian Patent No. 370853 dated 30.06.2021
Compounds, preparation of compounds and application thereof by Prof. J Dash et al.
3. Indian Patent No. 370710 dated 30.06.2021
Peptidomimetic ligands regulate BCL-2 expression by stabilizing DNA secondary structures by Prof. J Dash et al.
4. Indian Patent No. 388708 dated 08.02.2022
A method for manufacturing visible transparent conducting material by Prof. Durga Basak et al.

Patents list for 2022-23

Patents filed:

1. Indian Patent Application No. 202231028114 with filing date 16/05/2022
One-pot chemical synthesis of transition metal dichalcogenide and their alloys with elemental chalcogens
by Dr. Praveen Kumar et al.
2. Indian Patent Application No. 202231042899 with filing date 27/05/2022
Modified morpholino oligonucleotides incorporating 5- substituted pyrimidines to improve binding stability, hydrophobicity or lipophilicity useful for antisense applications
By Prof. S Sinha et al.
3. Indian Patent Application No. 202231052854 with filing date 15/09/2022
Coumarin conjugated thiazole peptide that binds to SARS-CoV-2 RNA G-quadruplex
By Prof. J Dash et al.
4. Indian Patent Application No. 202231064387 with filing date 10/11/2022
Ultra- small drug nano-conjugates (MTC-AUNPS) and process of its synthesis
By Prof. J Dash et al.
5. Indian Patent Application No. 202331002606 with filing date 12/01/2023
PCR-independent detection of DNA sequences using fluorescent label-free, INA-probe-based single molecule force spectroscopy approach
By Prof. R Mukhopadhyay et al.

Patent granted:

1. Indian Patent No. 401773 dated 21/07/2022
Oligo-guanidine based cellular transporter comprising heterocyclic rings with hydrophobic and/or lipophilic groups at n-terminal for effective delivery of nonpenetrable cargos *in-vitro* and *in-vivo*
by Prof. S Sinha et al.
2. Indian Patent No. 408183 dated 30/09/2022
Diaguanosine derivatives as synthetic membrane channels for drug delivery applications
by Prof. J Dash et al.
3. Indian Patent No. 418923 dated 23/01/2023
Substituted internal oligoguanidines as cellular penetrating agents
by Prof. S Sinha et al.