

**RANJEET DESHMUKH DENTAL COLLEGE AND RESEARCH  
CENTRE, NAGPUR**

**List of Patent Applications**

| <b>Sr. No.</b> | <b>Name of Staff Member</b> | <b>Name of the Department</b>          | <b>Year</b> | <b>Application Number</b> | <b>Title</b>                                                                       | <b>Applied/ Published</b> |
|----------------|-----------------------------|----------------------------------------|-------------|---------------------------|------------------------------------------------------------------------------------|---------------------------|
| 1              | Dr Neelam Pande             | Prosthodontics                         | 2024-2025   | 432809-001                | Gothic arch training device for complete denture patients                          | Published                 |
| 2              | Dr Saeed Deshpande          | Prosthodontics                         | 2024-2025   | 202421058430              | Device for adjustment of occlusal plane                                            | Published                 |
| 4              | Dr Saeed Deshpande          | Prosthodontics                         | 2024-2025   | 202221018438              | Device to check tissue compressibility of edentulous patients                      | Published                 |
| 5              | Dr. Akhil Rathi             | Prosthodontics                         | 2024-2025   | 202521014456              | ‘An adjustable impression tray’                                                    | Patent early publication  |
| 6              | Dr. Surekha Rathod          | Periodontics                           | 2024-2025   | 202521015106              | Herbal Effervescent Foaming tooth tablet and preparation method thereof            | Published                 |
| 7              | Dr. Surekha Rathod          | Periodontics                           | 2024-2025   | 202421072091              | An osteoanabolic dental gel formulation and preparation method thereof             | Published                 |
| 8              | Dr. Pranjali Bawankar       | Periodontics                           | 2024-2025   | 202521002126 A            | Patent entitled “A rechargeable Gum Massager”                                      | Published                 |
| 9              | Dr. Pranjali Bawankar       | Periodontics                           | 2024-2025   | 202521037820 A            | Patent applied for “Rechargeable gingival scraper.”                                | Published                 |
| 10             | Dr. Pranjali Bawankar       | Periodontics                           | 2024-2025   | 202521038035              | Patent applied for “Dental mouth prop with protective guard.”                      | Published                 |
| 11             | Dr. Pranjali Bawankar       | Periodontics                           | 2024-2025   | 202521037812              | Patent applied for “A customisable impression tray for dental implant procedures.” | Published                 |
| 12             | Dr. Pranjali Bawankar       | Periodontics                           | 2024-2025   | 202521029644              | Oral dental polymer composite hydrogel formulation and preparation method thereof  | Published                 |
| 13             | Dr. Chetana Makde           | Conservative Dentistry and Endodontics | 2024-2025   | 438025-001                | Customized jig tooth brushing simulation device                                    | Published                 |

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|-----|---------------------------------------------|----------------------------------------|-----------|----------------|--------------------------------------------------------------------------------------------------------------------|-----------|
| 14  | Dr. Vinisha Bajaj                           | Periodontics                           | 2024-2025 | 20242107352    | A rechargeable periosteal elevator                                                                                 | Published |
| 15  | Dr. Surekha Rathod                          | Periodontics                           | 2024-2025 | 202421006731   | An AI based portable device for Dental disease protection                                                          | Published |
| 16  | Dr. Rajesh Kubde                            | Conservative Dentistry and Endodontics | 2024-2025 | 20242104801A   | A tongue retractor                                                                                                 | Published |
| 17  | Dr. Pratima Shenoi                          | Conservative Dentistry and Endodontics | 2024-2025 | 202421059318A  | FOCUS                                                                                                              | Published |
| 18  | Dr. Rajesh Kubde                            | Conservative Dentistry and Endodontics | 2024-2025 | 202521009523 A | An automated device for cutting gutta percha                                                                       | Published |
| 19  | Dr. Gautam Badole                           | Conservative Dentistry and Endodontics | 2024-2025 | 202421101943-A | Split Mould For Single Tooth.                                                                                      | Published |
| 20  | Dr Neelam Pande                             | Prosthodontics                         | 2023      | 202321020845   | A device to receive full porcelain fused to metal restorations                                                     | Published |
| 21  | Dr. Rajashri Kolte<br>Dr. Abhay Kolte       | Periodontics & Implantology            | 2024      | 202321084978 A | A dental device for intraoral visibility and photography aid.                                                      | Published |
| 22. | Dr. Surekha Rathod<br>Dr. Pranjali Bawankar | Periodontics & Implantology            | 2024      | 202421043656   | A dental gel formulation and preparation method there of                                                           | Published |
| 23. | Dr. Surekha Rathod                          | Periodontics & Implantology            | 2024      | 202221069556   | NOVEL ZR55CO30Ti15 ALLOY                                                                                           | Published |
| 24  | Dr. Surekha Rathod<br>Dr. Pranjali Bawankar | Periodontics & Implantology            | 2024      | 202421030005   | Herbal Mouthwash for oral hygiene maintenance                                                                      | Published |
| 25  | Dr. Surekha Rathod<br>Dr. Prachi Rathi      | Periodontics & Implantology            | 2024      | 202321076838   | A dentognathic model for crown lengthening procedure.                                                              | Published |
| 26  | Dr. Surekha Rathod                          | Periodontics & Implantology            | 2023      | 202321041670   | A Process for preparation of gel by combination of Psidium guava leaf extract and Syzygium cumini seed extract for | Published |

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|----|------------------------------------------------------------|----------------------------------------|------|--------------|--------------------------------------------------------------------------------------------------|-----------|
|    |                                                            |                                        |      |              | the treatment of chronic periodontitis.                                                          |           |
| 27 | Dr. Pranjali Bawankar<br>Dr. Surekha Rathod                | Periodontics & Implantology            | 2024 | 202421052632 | A biomaterial based in-situ gel and preparation method thereof                                   | Published |
| 28 | Dr. Surekha Rathod<br>Dr. Prachi Rathi                     | Periodontics & Implantology            | 2024 | 202421053097 | “An apparatus for the preparation of PRF membranes”                                              | Published |
| 29 | Dr. Surekha Rathod<br>Dr. Pranjali Bawankar                | Periodontics & Implantology            | 2024 | 202421065423 | Clean Flow Perio Elevator                                                                        | Published |
| 30 | Dr. Surekha Rathod                                         | Periodontics & Implantology            | 2024 | 202421072091 | An osteoanabolic dental gel formulation and preparation method thereof”                          | Published |
| 31 | Dr. Surekha Rathod                                         | Periodontics & Implantology            | 2024 | 202421006731 | An Artificial Intelligence based potable device for dental disease detection                     | Submitted |
| 32 | Dr. Dhawal Mody<br>Dr. Vrushali Lathiya<br>Dr. Abhay Kolte | Periodontics & Implantology            | 2024 | 202421006084 | Mucoadhesive `proniosomal gel formulation comprising doxycycline and preparation method thereof. |           |
| 33 | Dr Pranjali Bawankar<br>Dr. Abhay Kolte                    | Periodontics & Implantology            | 2024 | 202421028984 | A self-retained intraoral retractor cum bite block                                               | Published |
| 34 | Dr. Pranjali Bawankar<br>Dr. Abhay Kolte                   | Periodontics & Implantology            | 2024 | 202421028983 | An in situ formulation comprising vitamin D3 and preparation method thereof                      | Published |
| 35 | Dr Pratima Shenoi<br>Dr. S R Shenoi<br>Dr. Shriya Shahu    | Conservative Dentistry and Endodontics | 2024 | 202021042255 | Patent Granted for A pouch for sterilization and storage of Dental Operative instruments.        | Published |
| 36 | Dr. Ashish Bodhade &                                       | Oral Pathology &                       | 2023 | 202321029215 | Utility Patent application titled                                                                | Applied   |

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|----|--------------------------------------------------------------------|-----------------------------|------|----------------|------------------------------------------------------------------------------------------|-----------|
|    | Dr. Alka Dive                                                      | Microbiology                |      |                | “DEVICE FOR JAW OPENING EXERCISE”                                                        |           |
| 37 | Dr. Sandeep Khandaikar, Dr. Shashank Hiwarkar, Dr. Gagandeep Lamba | Oral Surgery                | 2022 | 202221029849 A | A maxillo - mandibular fixation device                                                   | Published |
| 38 | Dr. Pranjali Bawankar Dr. Abhay Kolte                              | Periodontics & Implantology | 2023 | 202321034556A  | Vitamin D3 in situ gel formation and method of preparation thereof.                      | Published |
| 39 | Dr. Neelam Pande                                                   | Prosthodontics              | 2023 | 202321020845   | A device to receive Full porcelain-fused-to-metal restorations                           | Published |
| 40 | Dr. Surekha Rathod, Dr. Pranjali Bawankar, Dr. Shivshankar Jadhav  | Periodontics & Implantology | 2022 | 202221024984   | A Gel Composition for treatment of chronic periodontitis and method preparation thereof. | Published |
| 41 | Saee Deshpande                                                     | Prosthodontics              | 2022 | 202221018438   | “A device to check tissue compressibility for edentulous patients”                       | Applied   |