



**Dental Technology
Innovation Hub**



**INDIAN
ENDODONTIC
SOCIETY**

PREVESTDenPro®
THE FUTURE OF DENTISTRY

**PROPOSAL SUBMISSION FOR IES – PRIDE
PLATFORM FOR RESEARCH & INNOVATION FOR DENTAL
ENTREPRENEURSHIP**

- 1. NAME OF INNOVATOR, DESIGNATION
& AFFILIATION**
- 2. MENTOR NAME AND DETAILS (IF APPLICABLE)**

3. TITLE OF THE PROPOSED INNOVATION

4. PRODUCT DEVELOPMENT TYPE
– INNOVATION/ INDIGENIZATION

5. BACKGROUND & NEED ANALYSIS

Problem Statement that you are trying to solve through your project
Associated Disease Prevalence in India and Globally

e.g.

6. MARKET (RELEVANT) PRESENCE / SIZE

What is the market share of the technology related to the disease currently in the market

7. KEY OBJECTIVES & PROPOSED OUTCOME of YOUR PROJECT

8. BACKGROUND WORK DONE RELATED TO THE PROPOSED PROJECT

RESEARCH ACHEIVEMENTS OF PI INCLUDING PREVIOUS PATENTS/H-INDEX

9. FREEDOM TO OPERATE/ PRIOR ART SEARCH ANALYSIS FOR PATENT RELATED TO YOUR PROPOSED TECHNOLOGY

10. INNOVATION DETAILS AND METHODOLOGY

Starting TRL – Proposed outcome TRL
(Preferably pictorial representation)

Approach And Methodology Proposed In Brief

11. SIMILAR TECHNOLOGIES & COST COMPARISON

How Is It Different From Existing Technologies related to your Problem Statement

What Is The Cost Comparison Of Similar Existing Technologies

12. STEP BY STEP PROPOSED PLAN – GANTT CHART

SAMPLE PROPOSAL SUBMISSION

1. NAME OF INNOVATOR, DESIGNATION
& AFFILIATION
2. MENTOR NAME AND DETAILS (IF APPLICABLE)

3. TITLE OF THE PROPOSED INNOVATION

Endodontic Rotary File with Advanced Metallurgy

4. PRODUCT DEVELOPMENT TYPE

Innovation

5. BACKGROUND & NEED ANALYSIS

The prevalence of curved canals is 82.5%. The chance of file breakage during endodontic treatment is 8%. Hence there is a need for file system with advanced metallurgy with greater flexibility for curved canals in less cost.

6. MARKET (RELEVANT) PRESENCE / SIZE

The global Endodontic File market size was valued at USD 1586.21 million in 2022

7. KEY OBJECTIVES

- 1. Effective cleaning and shaping during root canal treatments in curved canals.*
- 2. High fracture resistance and flexibility with low breakage*

8. BACKGROUND WORK DONE RELATED TO THE PROPOSED PROJECT

RESEARCH ACHEIVEMENTS OF PI INCLUDING PREVIOUS PATENTS/H-INDEX

9. PRIOR ART SEARCH ANALYSIS FOR PATENT

There are no existing technologies, inventions that are similar to the file system which is confirmed by prior art search analysis for patent

10. INNOVATION DETAILS AND METHODOLOGY

*Enhanced Metallurgy
(manufacturing process using electric discharge machining)*

*STARTING TRL – 2
ENDING TRL- 5*

11. SIMILAR TECHNOLOGIES & COST COMPARISON

- Hyflex EDM Technology
1 set- Rs 3350*
- Innovated file system
1 set- Rs 1500
(Cost Effective)*

12. STEP BY STEP PROPOSED PLAN – GANTT CHART RELATED TO YOUR OBJECTIVES

Items / Time frame (months)	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Months 13-15	Months 16-18	Months 19-33	Months 33-36
Early validation and ethical approvals								
Late Validation								
Data analysis and further developments								
Clinical study to establish accuracy- multicentric								