

Signed Statement by the Applicant about the Research Work

I hereby declare that the research work under reference has not been given any award in the past. The research outcome has been a team effort with everyone playing their part.

All the research work has been conceived, designed and executed by me with important inputs from all the team members including students, staff and collaborators.

All the research work discussed for the award is published and referenced in the document at appropriate places. The laboratory research scholars have played a major role in conducting the experiments with appropriate help from the technical staff and central instrument facilities of CDRI. Their names in the manuscript appear as per their contributions with the first author contributing the maximum.

The research work has inputs from clinicians of KGMC (T.Chandra, Bogra J), Lucknow. Overall I have been responsible for the supervision, planning, and execution of the experiments and generating resources for the same. Project fellows and students have been the main driving and working force behind the projects with contributions from technical staff also.

Contribution by the applicant in the research work applied for the present award

A. Patents and contribution:

1) Chiral 3-aminomethylpiperidine derivative as inhibitors of collagen induced platelet activation and adhesion.

Inventors: Dikshit DK, Dikshit MD, , Irshad T, Siddiqui, Kumar A, Bhatta R, Jain GK, Barthwal MK, Misra A, Khanna V, Prakash P, Jain M, Singh V, Gupta V & Dwivedi AK.

US Patent Granted: US9206155B2/Dec8, 2015

In this study the applicant performed the platelet aggregation studies and work in dyslipidaemic hamsters. Applicant was also involved in the safety pharmacology studies of the same. Applicant is the current PI for the biological activity project.

Patent filed:

2) Pyranone fused Aza-heterocyclic fluorescent dyes useful fluorescent probes.

Inventors: Goel A, Raghuvanshi A, Jha AK, Dogra S, Yadav PN, Jaiswal A, Barthwal MK, 23/Dec/2015, 4242/DEL/2015

In this work the applicant identified the compounds specific to macrophage polarization. Compound putative targets were also identified by the applicant. The compound was synthesized by Dr Atul Goel and his group.

B. Publications and contributions:

3) In all the research papers mentioned, the applicant is the corresponding author and responsible for the work.

The work on herbals and small molecules was supported by the chemistry and pharmaceuticals team for relevant synthesis, pharmacokinetic and extracts characterization. (Dr AK Dwivedi, PP. Yadav and Dr T. Narender). Significant contributions by authors have been appropriately acknowledged in the manuscripts.



Manoj Kumar Barthwal

29 August 2023