APPENDIX

Patents from Thesis

Title of the innovation: COMPOSITIONS FOR MEDICAMENT OF OBESITY BY INHIBITING PANCREATIC LIPASE

Full name of the innovators: Paul Atish, Sengupta Pracheta, George Ginson, Yadav Nisha, Auti Prashant; **Patent Application No:** 202011049373

Publications from Thesis

1. **P Sengupta,** N Tiwari, T Bhatt and AT Paul. Mechanistically acting anti-obesity compositions/formulations of Natural origin: A Patent Review (2010-2021). Expert Opinion on Therapeutic Patent- *DOI: 10.1080/13543776.2021.1954161*……..**[Impact factor: 6.674]**
2. **P Sengupta,** G George and AT Paul. Functional interactions of Tea and Barberry phytochemicals for potential PL inhibition: *In vitro, in silico* and spectroscopic studies…… Phytomedicine [**Impact factor: 5.340**] …… Communicated
3. **P Sengupta,** P Auti, N Yadav and AT Paul. *Berberis aristata* and *Gymnema sylvestre* PL inhibitory synergistic combination for enhanced anti-obesity activity in Swiss albino mice…… Food & Function [**Impact factor: 5.396**] … Communicated

Conferences from Thesis

1. **P Sengupta** and AT Paul. Poster presentation on **"**Development and Optimization of Anti-Obesity Compositions from Indian Medicinal Plants using 3^2 factorial design" in 'New development in drug discovery from natural products and traditional medicines (DDNPTM-2018) at NIPER, SAS Nagar, 2018

Patents from obesity related work

1. **Title of the innovation:** Pharmaceutical composition for treating obesity
   Full name of the innovators: Paul Atish Tulshiram, George Ginson, S N C Sridhar, Sengupta Pracheta; **Patent Application details:** 202011024478
2. **Title of the innovation:** Indolyl Oxo acetamide Analogues as potent Pancreatic Lipase Inhibitors
   Full name of the innovators: Paul Atish Tulshiram, S N C Sridhar, Sengupta Pracheta, George Ginson; **Patent Application details:** 202011001052
3. **Title of the innovation:** Thiazolidinedione-indole compounds

APPENDIX

Full name of the innovators: Paul Atish, George Ginson, Auti Prashant, Sengupta Pracheta; **Patent application details:** 202011049372

Publications from obesity related work

1. SNC Sridhar, **P Sengupta** and AT Paul. Development and validation of a new HPTLC method for quantification of conophylline in *Tabernaemontana divaricata* samples obtained from different seasons and extraction techniques: Insights into variation of pancreatic lipase inhibitory activity. *Industrial Crops and Products*. 2018; 111, 462-470. [**Impact factor** -5.645]
2. G George, **P Sengupta** and AT Paul. Optimization of an extraction conditions for *Rumex nepalensis* anthraquinones and its correlation with Pancreatic Lipase inhibitory activity. *Journal of Food Composition and Analysis*. 2020; 92, 1-7. [Impact factor - 4.566]
3. SNC Sridhar, P Sengupta, S Palawat, PS Dileep, G George, AT Paul. Synthesis, molecular modelling, *in vitro* and *in vivo* evaluation of conophylline inspired novel benzyloxy substituted indole glyoxylamides as potent pancreatic lipase inhibitors. … *doi: 10.1080/07391102.2021.1930168* [Impact factor – 3.594]

Patents/Conferences from DST project work

1. **Title of the innovation:** Larvicidal formulation and a process for the preparation thereof **Full name of the innovators:** Paul Atish Tulshiram, Sengupta Pracheta, Sanjeev Kumar Patent Application details: 201911003889
2. **P Sengupta,** S Kumar and AT Paul. Poster presentation on **"**Comparative larvicidal activity of organic extracts from three *Piper* species against *Aedes aegypti*" in 'New development in drug discovery from natural products and traditional medicines (DDNPTM-2016) at NIPER, SAS Nagar, 2016

APPENDIX

BRIEF BIOGRAPHY OF THE CANDIDATE

Pracheta Sengupta was born in Rourkela, Orissa, India. She has passed her ICSE and ISC from G. D. Birla Centre for Education, Kolkata in 2006 and 2008, respectively. She pursued her Bachelor's degree (B. Pharmacy) from NSHM College of Pharmaceutical Technology (affiliated to Maulana Abul Kalam Azad University of Technology, MAKAUT, Kolkata formerly known as West Bengal University of technology, WBUT) and Master's degree (M. Pharmacy) in Pharmacology from the K.B. Institute of Pharmaceutical Education & Research, Gandhinagar during 2008-12 and 2013-15, respectively. She pursued herM. Pharmacy thesis on "Screening of Novel Compounds for Anti-Cancer Activity on different cell lines" under the guidance of Dr. Palak Shah and Prof. Gaurang B. Shah. She has qualified Graduate Pharmacy Aptitude Test (GPAT) in 2013 and received a prestigious scholarship Maneklal M. scholarship from Kadi Sarva Vishwavidyalaya, Gandhinagar.

In January 2016, she joined Department of Pharmacy, BITS Pilani (Pilani Campus) as a PhD scholar under the supervision of Prof. Paul Atish Tulshiram and was provided with the financial assistance from DST-SYST for first two years and BITS Pilani for the next three years. During the PhD tenure, she has worked in the DST- SYST project entitled "Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population" apart from her PhD thesis.

Ms. Pracheta has authored three research publications, one review article in international peer reviewed journals. She has filed five patents that are under review process. Apart from, she has presented her work in several international conferences such as 'New development in drug discovery from natural products and traditional medicines (DDNPTM-2016 & 2018) at NIPER, SAS Nagar.

APPENDIX

BRIEF BIOGRAPHY OF THE SUPERVISOR

Dr. Paul Atish Tulshiram Associate Professor and Ex-Head of the Department of Pharmacy at Birla Institute of Technology and Science, Pilani, completed his Bachelor of Pharmacy from University of Pune (Maharashtra). He pursued M.S. (Pharmaceutical Sciences) and Ph.D. in Natural Products from National Institute of Pharmaceutical Education and Research (NIPER, S.A.S Nagar, Punjab). After completion of his doctorate, he joined the research group of Prof. Ikhlas Khan as a Postdoctoral Research Associate at the National Center for Natural Product Research (University of Mississippi, USA).

His current research interest is identification of pancreatic lipase inhibitory natural products and synthesis of their inspired analogues for obesity management. He has several research grants from agencies such as DST-SERB, DST (SEED), DBT etc. and has completed 5 research projects. He has published 40 research articles in reputed international journals and has also contributed 24 official monographs on polyherbal formulations in The Ayurvedic Pharmacopoeia of India. He has supervised 3 PhD students and currently 5 students are pursuing Ph. D under his guidance. He is a reviewer for various journals of reputed publishers such as Elsevier, ACS, Wiley, Bentham, etc. and also for funding agencies such as DST SERB, South African Medical Research Council, etc.