

**CURRICULAM –VITAE**

**NAME** : DR. AMIT KUMAR PAHARI  
**DESIGNATION** : GUEST LECTURER  
**INSTITUTE** : MAHISHADAL GIRLS COLLEGE  
**DATE OF BIRTH (D/M/Y)** : 06.07.1986  
**FATHER'S NAME** : ASIT BARAN PAHARI  
**MOTHER'S NAME** : KANAKLATA PAHARI  
**ADDRESS (PERMANENT)** : VILL- GOPALCHAK, P.O.- UTTAR HARASCHAK, P.S.- CONTAI, DIST-  
PURBA MEDINIPUR, PIN- 721442, STATE – W.B.

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**EMAIL** : amitpahari374@gmail.com

**EDUCATIONAL QUALIFICATION:**

<b>EXAMINATION</b>	<b>BOARD/ UNIVERSITY</b>	<b>SCHOOL/ COLLEGE/ DEPTT.</b>	<b>YEAR OF PASSING</b>	<b>OBTAIN TOTAL MARKS</b>	<b>%OF MARKS</b>	<b>DIV./ CLASS</b>
<b>Madhyamik (Secondary)</b>	<b>W.B.B.S.E.</b>	<b>B.I.C.S</b>	<b>2001</b>	<b>585</b>	<b>73.12</b>	<b>1<sup>st</sup></b>
<b>H.S.</b>	<b>W.B.C.H.S.E.</b>	<b>C.K.V</b>	<b>2003</b>	<b>682</b>	<b>68.2</b>	<b>1<sup>st</sup></b>
<b>B.A./ B.Sc./B.Com.</b>	<b>VIDYASAGAR UNIVERSITY</b>	<b>P.K.C</b>	<b>2006</b>	<b>468</b>	<b>58.5</b>	<b>2<sup>nd</sup></b>
<b>M.A./M.Sc./M.Com.</b>	<b>VIDYASAGAR UNIVERSITY</b>	<b>M.C</b>	<b>2008</b>	<b>726</b>	<b>72.6</b>	<b>1<sup>st</sup></b>
<b>M. Phil.</b>						

<b>Ph. D.</b>	<b>UNIVERSITY OF KALYANI</b>	<b>Dept. of Chemistry</b>	<b>2014</b>	<b>153</b>	<b>76.5</b>	<b>1<sup>st</sup></b>
<b>NET</b>	<b>C.S.I.R</b>	<b>-</b>	<b>2008</b>	<b>-</b>	<b>-</b>	<b>-</b>

**LANGUAGE KNOWN:**

<b>LANGUAGE(S)</b>	<b>READING</b>	<b>WRITING</b>	<b>SPEAKING</b>
Bengali	<b>YES</b>	<b>YES</b>	<b>YES</b>
English	<b>YES</b>	<b>YES</b>	<b>YES</b>
Hindi	<b>YES</b>	<b>YES</b>	<b>YES</b>

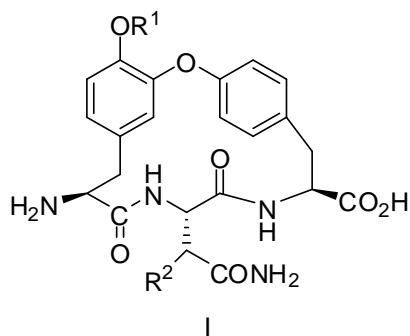
**TEACHING EXPERIENCE:**

<b>Name of School / College/ University/ Institution</b>	<b>Designation</b>	<b>Date of Joining</b>	<b>Date of Leaving</b>	<b>Total Duration</b>	<b>Hon's./General PG/ M.Phil.</b>
<b>MAHISHADAL GIRLS COLLEGE</b>	<b>GUEST LECTURER</b>	<b>15.01.2014</b>	<b>Till now</b>	<b>4 Years</b>	

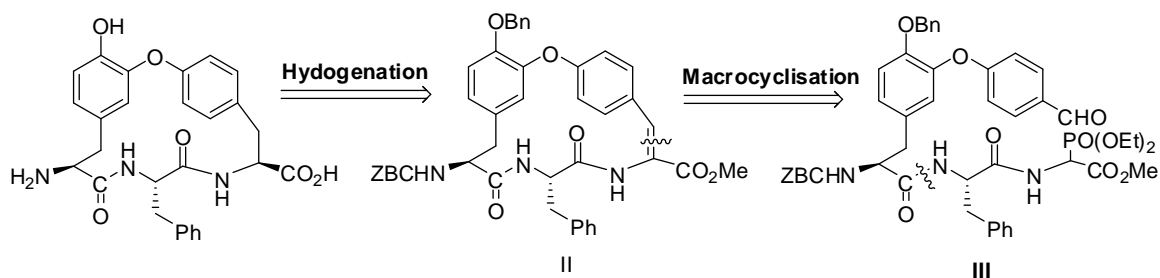
**RESEARCH EXPERIENCE:**

The thesis entitled “Synthesis of  $\alpha$ -amino acid and cyclic peptide of biological interest” is divided into three chapters.

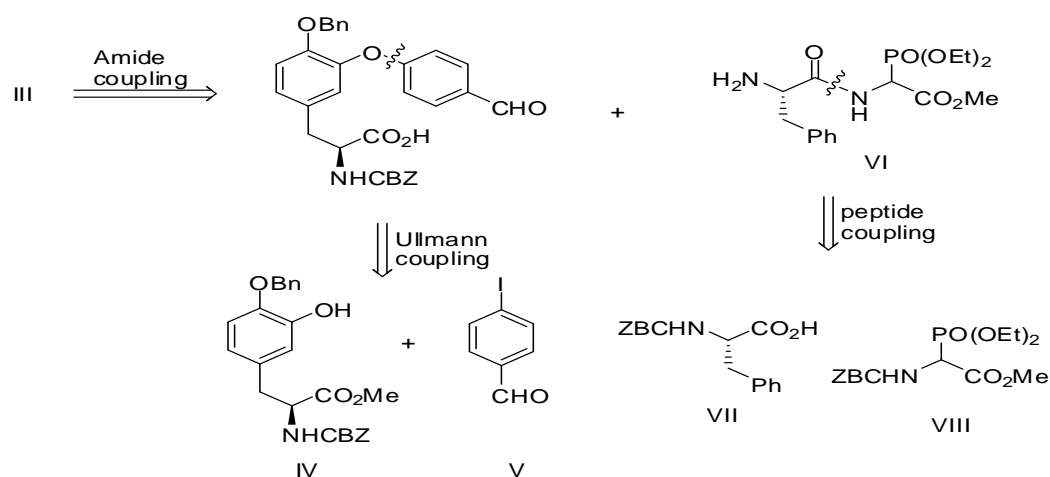
**Chapter-I**, entitled “the intramolecular Horner-Wardsworth-Emmons (H.W.E) type olefination as a novel route for the total synthesis of the diaryl ether-based cyclopeptide OF4949 and some analogues”. The OF-4949s represented by the general structure I are known aminopeptidase inhibitors and thus constitute an important target for analogue design.



We became interested to extend the study towards the synthesis of OF-4949 through macrocyclisation of the key aminophosphonate derivative III.

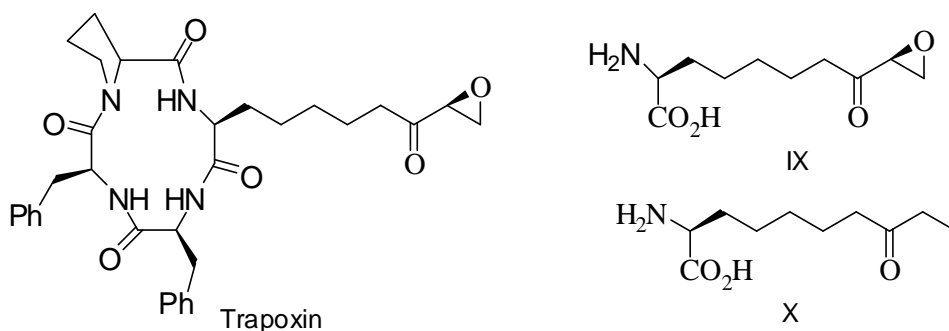


Further retrosynthetic analysis of III reveals the fragments IV, V, VII, and VIII for a convergent union.

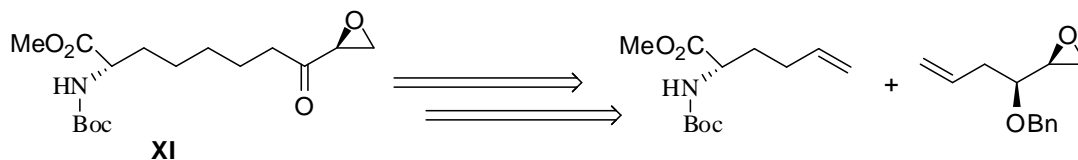


**Chapter-II**, entitled “Synthesis of  $\alpha$ -amino acid derivatives using cross-metathesis reaction” describes our efforts towards the synthesis of the key  $\alpha$ -amino acid fragment of a class of biologically active cyclic peptides are described. The naturally occurring cyclic peptide Trapoxin has as

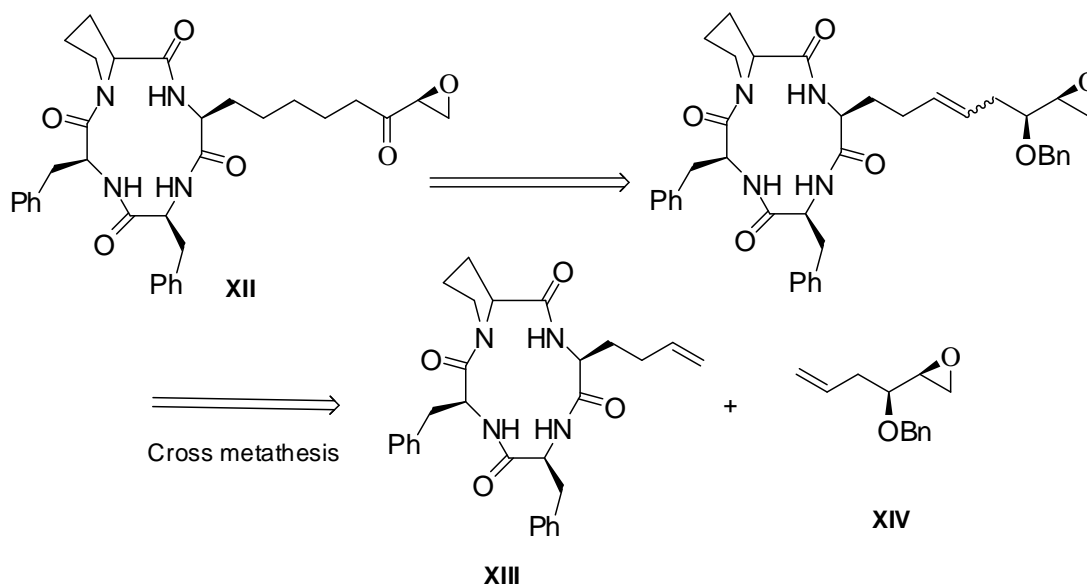
constituent a nine-carbon  $\alpha$ -amino acid terminating in an unusual epoxy ketone moiety. Similarly, the  $\alpha$ -amino acids IX-X are also constituents of other members of the class.



We became interested in developing a general synthetic route to this class of  $\alpha$ -amino acid derivatives. The retrosynthetic analysis for the synthesis of the epoxy ketone containing  $\alpha$ -amino acid derivative XI is given below.



**Chapter-III**, entitled “Synthesis of cyclopeptide derivatives of biological interest”. The retro-synthetic analysis for the synthesis of trapoxin XII is outlined below. Thus, functional group interconversion of the target molecule gives the unsaturated compound which could be further disconnected into two olefins XIII and XIV.



**PUBLISHED PAPERS IN JOURNAL:**

Sl. No.	Title with page no	Journal	ISSN/ISBN No.
1	A stereodivergent route to two epimeric 2-pyrrolidinylglycine derivatives.	<i>Tetrahedron letters</i>	0040-4039
2	Synthesis of the unusual $\alpha$ -amino acid component of some novel histone deacetylase inhibiting cyclic peptides.	<i>Tetrahedron</i>	0040-4020
3	A modular synthesis of some biologically relevant cyclic peptides through Late-stage functionalization.	<i>Synthesis</i>	0039-7881

**SEMINAR / WORKSHOPS PARTICIPATIONS:**

1. National seminar on Current Trends in Chemistry-III, Kalyani University, Kalyani, West Bengal, India (March 20-21, 2009).
2. National seminar on Current Trends in Chemistry-IV, Kalyani University, Kalyani, West Bengal, India (February 26, 2010).
3. National seminar on Current Trends in Chemistry-V, Kalyani University, Kalyani, West Bengal, India (February 25, 2011).

**SPECIAL ACADEMIC ACHIEVEMENT:**

1. Awarded the prestigious National Fellowship(**JRF**) from Council of Scientific and Industrial Research Govt. of India for pursuing the research career.
2. Awarded the Senior Research Fellowship (**SRF**) from the Council of Scientific and Industrial Research, New Delhi, Govt. of India.

**SYNTHETIC CHEMISTRY SKILLS INCLUDING:**

- Multistep organic synthesis in amino acids, carbohydrates and alkaloid Chemistry
- Reactions with air, light, moisture-sensitive and hazardous compounds
- Performing reactions under inert atmosphere
- Metal catalyzed different coupling reactions

- Different rearrangement reactions
- Column chromatography purification of complex mixtures
- Crystallization
- HPLC, Chiral HPLC, SFC, LCMS and SOR analysis Microwave assisted reactions

#### **TECHNICAL SUPPORTIVE SKILLS:**

- Proficient in chemistry data bases SciFinder, Reaxys, Scopus and chemistry related Computer packages like CS-Chem Draw, ISIS-Draw, Chem.-3D, MestReC etc.
- Analysis of complicated organic structures by <sup>1</sup>H, <sup>13</sup>C, COSY, NOESY, DEPTNMR spectroscopy, FT-IR spectroscopy, HRMS spectroscopy, LCMS.
- QC analysis using LCMS, HPLC, chiral HPLC and SFC.
- Knowledge of Techniques and expertise in handling instruments like IR (Perkin), NMR (Bruker-400 & 500 MHz), Polarimeter (Rudolph Autopol-IV), HPLC (Shimadzu), Parr shaker, Parr Autoclave, Microwave reactors etc.

#### **RESEARCH INTERESTS:**

- Macrocyclic natural products
- Coupling reactions
- Total Synthesis
- Asymmetric synthesis
- Synthetic methodologies
- Peptide chemistry
- Medicinal Chemistry

#### **Declaration:**

I hereby declare that all the given information are true & can be presented whenever asked.

Date: 08.09.2018

Place: Mahishadal

*Amit Kumar Pahari.*  
(Amit Kumar Pahari)