

**Dr. M. Hormi (Hormi Mecadon)**



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Full Name: **Dr. M. HORMI (HORMI MECADON)**  
Qualification: M.Sc., CSIR-UGC NET, PhD (Organic Chemistry) [PhD awarded on 30/05/2012, North-Eastern Hill University, Shillong, Meghalaya.]  
Date of Birth: 21/02/1983  
Present Address: Assistant Professor, Department of Chemistry, Pettigrew College (Manipur University), Ukhrul, 795142, Manipur, India.  
Permanent Address: **Nampisha (Ramphoi), Kamjong District, Manipur, India.**  
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### **Research Experience**

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- (1) Five (5) years Experience in Organic Synthesis during the PhD course
- (2) Four years as DST INSPIRE Faculty in Gauhati University.

### **Teaching experience:**

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M.Sc. (Chemistry), Gauhati University (GU)	Three (03) years and Six (06) months (Both theory & Practicals)
Post Graduate Diploma Course	Three (03) years and Six (06) months in Analytical Chemistry (PGDAC), GU. (Both theory & Practicals)
Undergraduate Students	(1) One year (taught two semesters at the Deptt. of Chemical Science, Institute of Science & Technology, Gauhati University) (2) As Assistant Professor at ADP College, Nagaon, Assam (Gauhati University) from Dec. 14, 2016-Feb. 22, 2018. (3) As Assistant Professor, Department of Chemistry, Pettigrew College (Manipur University), Ukhrul, Manipur (Manipur University), 23/02/2018-

## Awards

- # Research Fellowship for Meritorious Students in Sciences (RFSMS), 2006
  - # Rajiv Gandhi National Fellowship (RGNF), 2007
  - # D. S. Kothari Post-doctoral Fellowship, 2012
  - # DST-INSPIRE Faculty, AORC, 2012
  - # Second best poster presentation in The Chemistry Education & Research: National Convention of Chemistry Teachers (NCCT-2012), Department of Chemistry, Gauhati University, November 2-4, 2012.
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## Research Interests

- # Development of Novel Synthetic Technologies Conforming to Green Chemistry Principles.
  - # Natural Products Chemistry/ Phytochemistry.
  - # Heterocyclic Chemistry
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## Scientific Skills

- # Handling of Reactions under Dry Conditions, Low Temperature, Inert Atmosphere & Microwave Conditions
  - # Purification of Compounds using various Techniques such as Column Chromatography (flash & gradient), Preparative TLC and Crystallization.
  - # Structural Elucidation of Compounds through Techniques such as NMR, IR, Mass and Elemental Analysis.
  - # Knowledge in Handling of Instruments such as HPLC, GC, FT-IR and Microwave Reactor.
  - # Good Knowledge in Microsoft Word, Excel, PowerPoint, Adobe Photoshop (MS OFFICE) etc.
  - # Good Knowledge in Handling of Research related Softwares such as Chemdraw/ ChemBiodraw Ultra 12, MDL-ISIS Draw, ORTEP, MERCURY, Beilstein and SciFinder.
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## Research Publications

([https://scholar.google.co.in/scholar?hl=en&as\\_sdt=0%2C5&q=hormi+mecadon&oq=h](https://scholar.google.co.in/scholar?hl=en&as_sdt=0%2C5&q=hormi+mecadon&oq=h))

1. “ $\gamma$  – Alumina as a Recyclable Catalyst for the Four-component Synthesis of 6-amino-4-alkyl/aryl-3-methyl-2,4-dihydropyrano[2,3-*c*]pyrazole-5-carbonitriles in Aqueous Medium”.

**Hormi Mecadon**, Md. Rumum Rohman, Mantu Rajbangshi, Bekington Myrboh\*  
*Tetrahedron Letters*, **2011**, 52, 2523-2525 (Elsevier Publications, International).

2. "L-proline as an Efficient Catalyst for the Multi-component Synthesis of 6-amino-4-alkyl/aryl-3-methyl-2,4-dihydropyrano[2,3-*c*]pyrazole-5-carbonitriles in Water".

**Hormi Mecadon**, Md. Rumum Rohman, Iadeishisha Kharbangar, Badaker M. Laloo, Icydora Kharkongor, Mantu Rajbangshi, Bekington Myrboh\*

*Tetrahedron Letters*, **2011**, 52, 3228-3231. (Elsevier Publications, International).

3. "Potassium Hydroxide Impregnated Alumina (KOH-Al<sub>2</sub>O<sub>3</sub>) as a Recyclable Catalyst for the Solvent-Free Multi-component Synthesis of Highly Functionalized Substituted Pyridazines and/or Substituted Pyridazin-3(2*H*)-ones under Microwave Irradiation".

**Hormi Mecadon** and Bekington Myrboh\*

*ISRN Organic Chemistry*, Volume **2011**, Article ID **406427** (Hindawi Publishing Corporation, International)

4. "Reaction of Selenium Dioxide with Aromatic Ketones in the Presence of Boron Trifluoride Etherate: A Protocol for the Synthesis of Triarylethanones".

Badaker M. Laloo, **Hormi Mecadon**, Md. Rumum Rohman, Iadeishisha Kharbangar, Icydora Kharkongor, Mantu Rajbangshi, Rishanlang Nongkhlaw and Bekington Myrboh\*

*Journal of Organic Chemistry*, **2012**, 77, 707-712 (ACS Publications International).

5. "One-pot Synthesis of Unsymmetrical Benzils by Oxidative Coupling Using Selenium Dioxide and *p*-Toluenesulfonic Acid Monohydrate".

Md. Rumum Rohman, Icydora Kharkongor, Mantu Rajbangshi, **Hormi Mecadon**, Badaker M. Laloo, Priti R. Sahu, Iadeishisha Kharbangar and Bekington Myrboh\*

*European Journal of organic Chemistry* (Full Paper), **2012**, 320-328.

6. "Synthesis of Important  $\beta$ -functionalized 5-methyl-1*H*-pyrazol-3-ol derivatives in the presence of  $\gamma$ -alumina Catalyst in Aqueous Medium"

Md. Rumum Rohman, **Hormi Mecadon**, Abu T. Khan, Bekington Myrboh\*

*Tetrahedron Letters* **2012**, 53, 5261-5264.

7. "Synthesis of 2,3-dihydro-6*H*-1-oxa-3*a*-aza-phenalenes and its benzo/hetero-fused analogs".

Pushpak Mizar, **Hormi Mecadon**, Mantu Rajbangshi, Bekington Myrboh\*

*Journal of Heterocyclic Chemistry* **2011**, 48, 1187-1191 (Wiley Publications International).

8. "Synthesis of  $\beta$ -Amino Carbonyl Compounds *via* the Iodine-Alumina Catalyzed Three-component Coupling Reaction Under Microwave Irradiation".

Mantu Rajbangshi, Md. Rumum Rohman, Icydora Kharkongor, **Hormi Mecadon**, Bekington Myrboh\*

*Organic Chemistry International*, Vol. **2011**, Article ID **514620** (Hindawi Publishing Corporation International).

9. "Potassium Fluoride-Alumina (KF-Al<sub>2</sub>O<sub>3</sub>) as an Efficient and Recyclable Basic Catalyst for the Synthesis of 4*H*-pyran-3-carboxylates and 5-acetyl-4*H*-pyrans".

Iadeishisha Kharbangan, Md. Rumum Rohman, **Hormi Mecadon**, Bekington Myrboh\*  
*Int. J. Org. Chem.* **2012**, 2, 282-286 (Scientific Research International).

10. "Synthetic Developments in Functionalized Pyrano[2,3-*c*]pyrazoles: A Review". [**invited**]

**Hormi Mecadon**, Bekington Myrboh\*, Mantu Rajbangshi, Md. Rumum Rohman, Icydora Kharkongor, Iadeishisha Kharbangan, Badaker M. Laloo, Baskhemlang Kshiar.  
*Organic Preparations and Procedures International*, **2013**, 45, 253-303 (Taylor & Francis International).

11. "FeCl<sub>3</sub>.6H<sub>2</sub>O catalyzed Aqueous Media Domino Synthesis of 5-monoalkylbarbiturates: Water as both reactant and solvent."

Subarna J. Kalita, **Hormi Mecadon\***, Dibakar C. Deka\*  
*RSC Advances* **2014**, 4, 10402-10411 (Royal Society of Chemistry).

12. "Reaction of 6-aminouracils with aldehydes in water as both solvent and reactant under FeCl<sub>3</sub>.6H<sub>2</sub>O Catalysis: Towards 5-alkyl/arylidenebarbituric acids"

Subarna J. Kalita, **Hormi Mecadon\***, and Dibakar C. Deka\*  
*RSC Advances* **2014**, 4, 32207-32213.

15. "Pot, atom and step-economic (PASE) synthesis of 5-monoalkylbarbiturates through domino aldol-Michael reaction"

Subarna Jyoti Kalita, **Hormi Mecadon\***, Dibakar C. Deka\*  
*Tetrahedron Letters* **2015**, 56, 731-734 (*Elsevier*). [*as corresponding author*]

16. "Ni-Al<sub>2</sub>O<sub>3</sub> as reusable heterogeneous catalyst for expedient one-pot synthesis of naphthopyrans"

Subarna Jyoti Kalita, Nilakhy Saikia, Dibakar C. Deka\*, **Hormi Mecadon\***  
*Res. Chem. Intermed.* **2016**, 42, 6863-6871.

17. "A new, convenient and expeditious synthesis of 4-alkyl-5-methyl-1*H*pyrazol-3-ols in water through a multicomponent reaction"

Subarna Jyoti Kalita, Rajarshi Bayan, Jutika Devi, Sanfaori Brahma, **Hormi Mecadon**, Dibakar Chandra Deka.  
*Tetrahedron Letters* **2017**, 58, 566-569.

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#### Research papers published in Proceedings:

1. "Study of L-proline and  $\gamma$ -alumina as Green Catalysts for the Synthesis of 6-amino-2,4-dihydro-3-methyl-4-aryl/alkylpyrano[2,3-*c*]pyrazoles".

**Hormi Mecadon**, Bekington Myrboh\*  
*Proceedings of the National Seminar on Global Trends in Modern Chemistry (NSGTMC), St. Anthony's College, 1-8 December 2010, pp.71-74 (ISBN 978-81-910147-1-6) (National).*

2. "Tandem Multi-component Heterocyclization Approach Towards Some Pyrazole bearing Molecules"

**Hormi Mecadon**

*Proceedings of The Chemistry Education & Research: National Convention of Chemistry Teachers (NCCT-12, Department of Chemistry, Gauhati University, 1-4 November 2012, pp. 25 (National).*

3. "Domino reactions in the synthesis of some selected heterocycles"

**Hormi Mecadon**

[Invited Lecture] *National Seminar on Newer Trends in Chemistry and Environment [NCTCE-2014], Don Bosco College, Tura, Meghalaya, 10 & 11 Dec. 2014, Book of Abstracts, pp 17 (National).*

4. "FeCl<sub>3</sub>.6H<sub>2</sub>O Catalyzed Aqueous Media Domino Synthesis of 5-monoalkylbarbiturates: Water as both reactant and solvent"

**Hormi Mecadon**

*Abstracts of the 20<sup>th</sup> International Conference on Organic Synthesis (ICOS 20), 29<sup>th</sup> June-4<sup>th</sup> July, 2014, ELTE University, Budapest, Hungary (International).*

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## **Research Projects undertaken**

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DST-INSPIRE Faculty Project (as Principal Investigator)

Title: "*Synthesis of Heterocyclic Compounds Based on Polyamine nucleophiles: An Investigation on Synthesis and Biological Evaluation of some Heterocyclic Products from Antidiabetic drugs (Metformin, Phenformin and Buformin) and other nucleophiles*"

**Funding Agency:** DST-INSPIRE Faculty Scheme, under the Department of Science & Technology (DST).

**Project Duration:** 5 (five) years (2012-2017)

**Project Amount:** Rs. 35 Lakhs (@ Rs. 7 lakhs per annum)

[\***Note:** The Project is part of the DST-INSPIRE Faculty Award scheme, which is awarded along with the Faculty scheme.]

**Status: Completed**

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## **Project Supervision**

M.Sc. Project Supervision : 10 Students (2013- June 2016)