Proforma for information to be provided by the Teaching/ Academic/ Research Staff

1. Name: (first name) MAYA (middle name) SHANKAR (surname) SINGH

2. Designation: PROFESSOR

3. Academic Qualifications:

Sr.	Degree	Institution	Year
1	B. Sc.	Gorakhpur University (U. P. College, Varanasi)	1979
2	M. Sc.	Banaras Hindu University, Varanasi	1981
3	Ph. D.	Banaras Hindu University, Varanasi	1986

4. Area of Specialization: (brief write up, 200 words)

The main focus of our research is to develop highly chemo- and regio-selective eco-compatible one-pot multicomponent coupling protocols for various bioactive heterocycles and carbocycles with substituent and skeletal diversity. By virtue of astonishing success of our newly developed one-pot reactions with regard to atom/cost-economy, sustainability, versatility, scope, and applicability, they have received significant attention of synthetic, medicinal, and material chemists. The remarkable renovation of a simple synthon β-oxo/α enolic dithioester has been achieved toward its diversification for variety of purposes exhibiting power and diversity of domino annulations. This has the power and diversity of chemo- and regioselective domino annulations to pave the way for a deeper understanding of site selectivity. It involves Michael/Knoevenagel/aldol/aza-ene/Diels-Alder/aromatic nucleophilic substitution/Keto-enol and ene-amine isomerizations/cyclization sequences. An effective control for the selective cleavage of S-H, C-C and C-S bonds occurs with concomitant formation of new carbon-carbon and carbon-heteroatom bonds in one-pot in a single operation. Having more than 34 years of research experience, my group is involved in design and development of sustainable diversity oriented synthetic (SDOS) methods for biologically important molecules and drug intermediates; development of new efficiency increasing reactions such as domino reactions and multicomponent coupling reactions. This has resulted over 156 publications in journals of high repute and training of 22 Ph. D. students.

5. Contact Information: Phone: +91-9415372614
   e-mail: mayashankarbhu@gmail.com; mssingh@bhu.ac.in

6. Projects Undertaken as PI:
   Completed – 15; CSIR (06); UGC (04); DST (04); INDO-US (01)
   Running – 02; SERB (01); CSIR (01)

7. Awards/ Recognitions if any:
   Member of S. S. Bhatnagar Award Committee (Chemical Sciences) in **2016 & 2017**

Organized J-NOST 2017 International Conference at Dept. of Chemistry, Institute of Science, BHU, Varanasi
CRSI Bronze Medal - **2017**
Recipient of UGC-BSR One-Time-Grant in **2015**
RWTH Aachen University, Aachen, Germany in **2015** under INSA Bilateral Exchange Programme
Vice-Chancellor's Award for Excellence in Research for the year **2014**
Fellow, The National Academy of Sciences, India (FNASc) - **2013**
Member, American Chemical Society (ACS) since **2015**
UGC-UKIERI Thematic Partnership 2013 between BHU and Loughborough University, UK
INSA Bilateral Exchange Fellowship to visit University of Hohenheim, Stuttgart, Germany in **2012**
SERC (DST) Visiting Fellow in **2001** at National Chemical Laboratory, Pune, India
SERC (DST) Visiting Fellow in **2000** at Indian Institute of Science, Bangalore, India
INSA Visiting Fellow in **1997 & 1998** at National Chemical Laboratory, Pune, India
Member board of studies to various Universities and Chancellor Nominee of the Recruitment Board for various Universities

8. List of 10 major Publications: (in order of importance)

1. Metal-Free One-Pot Four-Component Cascade Annulation in Ionic Liquids at Room Temperature: Convergent Access to Thiazoloquinolinone Derivatives.
   Anshu Singh, Abhijeet Srivastava and Maya Shankar Singh, *J. Org. Chem*. **2018**, *83*, 7950-7961.
2. Catalyst-Free One-pot Access to Pyrazoles and Disulfide Tethered Pyrazoles via Deamidative Heteroannulation of β-Ketodithioesters with Semicarbazide Hydrochloride in Water.
   Suvajit Koley, Sumit K. Panja, Sonam Soni, and Maya Shankar Singh, *Adv. Synth. Catal*. **2018**, *360*, 1780-1785.
3. Copper-Catalyzed one-pot cross-dehydrogenative thienannulation: Chemoselective access to naphtho[2,1-b]thiophene-4,5-diones and subsequent transformation to benzo[a]thieno[3,2-c]phenazines.
   Gaurav Shukla, Abhijeet Srivastava, and Maya Shankar Singh, *J. Org. Chem*. **2018**, *83*, 2173-2181.
4. Access to Fully Substituted Thiazoles and 2,3-Dihydrothiazoles via Copper-Catalyzed [4+1] Heterocyclization of α-(N-hydroxy/aryl)imino-β-oxodithioesters with α-Diazocarbonyls.
   Abhijeet Srivastava, Gaurav Shukla, Dhananjay Yadav, and Maya Shankar Singh, *J. Org. Chem*. **2017**, *82*, 10846-10854.
5. Switching selectivity of α-enolic dithioesters: One pot direct access to functionalized 1, 2- and 1, 3-dithioles.
   Suvajit Koley, Tanmoy cahanda, Subhasis Samai and Maya Shankar Singh, *J. Org. Chem*. **2016**, *81*, 11594-11602.
6. *p*-TSA/Base promoted propargylation/cyclization of β-ketothioamides for the regioselective synthesis of highly substituted (hydro)thiophenes.
   Ganesh Chandra Nandi and Maya Shankar Singh, *J. Org. Chem*. **2016**, *81*, 5824-5836.
7. Metal and Catalyst-Free, Formal [4 + 1] Annulation via Tandem C=O/C=S Functionalization: One Pot Access to 3, 5-Disubstituted/Annulated Isothiazoles.
   Gaurav Shukla, Abhijeet Srivastava, and Maya Shankar Singh, *Org. Lett*. **2016**, *18*, 2451-2454.
8. Acid-controlled chemodivergent synthesis of three differently substituted quinolines via site-selective [4+2] annulation of ortho-aminoaryl ketones with α-enolic dithioesters.

Suvajit Koley, Tanmoy Chanda, B. Janaki Ramulu, Sushobhan Chowdhury, Namrata Anand and Maya Shankar Singh, *Adv. Synth. Catal*. **2016**, *358*, 1195-1201.

9. Iodine Mediated Copper-Catalyzed Highly Efficient α-C(sp2)-Thiomethylation of α-Oxoketene Dithioacetals with Dimethyl Sulfoxide in One-Pot.
   Gaurav Shukla, Abhijeet Srivastava, Anugula Nagaraju, Keshav Raghuvanshi and Maya Shankar Singh, *Adv. Synth. Catal*. **2015**, *357*, 3969-3976.
10. Metal-free reagent dependent S-S and C-C homocoupling of α-enolic dithioesters at room temperature: Direct access to fully substituted symmetrical thiophenes via chemoselective Paal-Knorr approach.
    B. Janaki Ramulu, Anugula Nagaraju, Sushobhan Chowdhury, Suvajit Koley and Maya Shankar Singh, *Adv. Synth. Catal*. **2015**, *357*, 530-538.

9. Additional Information/ Achievements:

VISITS ABROAD:
(i) Nagoya Institute of Technology, Nagoya, Japan
(ii) University of Arizona at Tucson, Arizona, USA
(iii) Michigan State University, East Lansing, MI 48824, Michigan, USA
(iv) Loughborough University Leicestershire, UK
(v) Leicester University, Leicestershire, UK
(vi) University of Hohenheim, Stuttgart, Germany under INSA Bilateral Exchange Programme
(vii) RWTH Aachen University, Aachen Germany under INSA Bilateral Exchange Programme

Books: 03 (Published from Pearson-Education and Wiley-VCH, Weinheim, Germany)
1. "Advanced Organic Chemistry-Reactions and Mechanisms"–Singh, Maya Shankar, Pearson Education (Singapore) Pvt. Ltd., **2005** (ISBN 81-297-0499-4)
2. "Organic Chemistry"–Wade, L. G. and Singh, M. S. Pearson Education, (Dorling Kindersley Pvt. Ltd.), **2008** (ISBN 978-81-7758-739-5)
3. "Reactive Intermediates in Organic Chemistry-Structure, Mechanism and Reactions" Singh, Maya Shankar, Wiley-VCH, Weinheim, **2014** (ISBN 978-3-527-33594-7)

ADMINISTRATIVE SERVICE TO UNIVERSITY:
Warden and Administrative Warden, Broacha, Dalmia, and Bhabha Hostels 2004-2012
Member, Central Purchase Committee, BHU 2008-10
Chairman, Purchase Committee for Chemicals, Plastic wares, and Glass wares 2008-10
Coordinator, Monitoring Cell of Anti-ragging Committee, Institute of Science 2016-17

10. Full List of Publications:

<u>LIST OF PUBLICATIONS</u> (in reverse chronological order)

<u>Scientific Reviews:</u>
8. Developments toward the synthesis and application of 3-hydroxyindanones.
Tanmoy Chanda and **Maya Shankar Singh**, *Org. Biomol. Chem*. **2016**, *14*, 8895-8910.

7. Advances of azide-alkyne cycloaddition-click chemistry over the recent decade.
Maya Shankar Singh, Sushobhan Chowdhury, Suvajit Koley, *Tetrahedron*, **2016**, *72*, 5257-5283.

6. Progress in 1,3-dipolar cycloadditions in the recent decade: an update to strategic development towards the arsenal of organic synthesis.
Maya Shankar Singh, Sushobhan Chowdhury and Suvajit Koley, *Tetrahedron*, **2016**, *72,* 1603-1644.

5. *ortho*-Quinone methide (*o*-QM): a highly reactive, ephemeral and versatile intermediate in organic synthesis.
Maya Shankar Singh, Anugula Nagaraju, Namrata Anand and Sushobhan Chowdhury, *RSC Adv*. **2014**, *4*, 55924-55959.

4. *β*-Oxodithioesters: A New Frontier for Diverse Heterocyclic Architectures.
Maya Shankar Singh, Ganesh Chandra Nandi and Tanmoy Chanda, *RSC Adv.* **2013**, *3*, 14183-14198.

3. Recent developments in solvent-free multicomponent reactions: a perfect synergy for eco-compatible organic synthesis.
Maya Shankar Singh and Sushobhan Chowdhury, *RSC Adv.* **2012**, *2*, 4547-4592 (One of the top 10 most accessed articles in 2012 and 2013).

2. Recent Advances in $InCl_3$-Catalyzed One-pot Organic Synthesis.
Maya Shankar Singh and Keshav Raghuvanshi, *Tetrahedron* **2012**, *68*, 8683-8697.

1. Recent Advances in P_2O_5-Catalyzed Organic Synthesis.
Maya Shankar Singh, *Current Catal.* **2012**, *1*, 155-163 (Invited Review Article).

<u>Articles:</u>

<u>2018</u>

157. Copper-Catalyzed One-pot [3 + 2] Annulative Coupling of β-Oxoketene *N,S*-acetals with in Situ Generated 1,2-Naphthoquinones: Easy Access to 1-Aroyl (or Alkanoyl)-2-Thioalkyl-3-Aryl (or Alkyl)-3*H*-Benzo[*e*]indole-4,5-diones and Subsequent Post-Functionalization.
Dhananjay Yadav, Gaurav Shukla, Monish A. Ansari, Abhijeet Srivastava, and **Maya Shankar Singh**, *Tetrahedron* **2018**, *74*, DOI: 10.1016/j.tet.2018.08.026. (Elsevier; IF: 2.641)

156. Metal-Free One-Pot Four-Component Cascade Annulation in Ionic Liquids at Room Temperature: Convergent Access to Thiazoloquinolinone Derivatives.
Anshu Singh, Abhijeet Srivastava and **Maya Shankar Singh**, *J. Org. Chem*. **2018**, *83*, 7950-7961. (ACS; IF: 4.849)

155. Catalyst-Free One-pot Access to Pyrazoles and Disulfide Tethered Pyrazoles via Deamidative Heteroannulation of β-Ketodithioesters with Semicarbazide Hydrochloride in Water.
Suvajit Koley, Sumit K. Panja, Sonam Soni, and **Maya Shankar Singh**, *Adv. Synth. Catal*. **2018**, *360*, 1780-1785. (Wiley; IF: 5.646)

154. 2-Mercaptoquinoline Analogues: A Potent Antileishmanial Agent.
Suvajit Koley, Neeraj Tiwari, Neelabh, Rakesh K. Singh, **Maya Shankar Singh**, *Chemistry Select*, **2018**, *3*, 1688-1692.

153. Copper-Catalyzed one-pot cross-dehydrogenative thienannulation: Chemoselective access to naphtho[2,1-*b*]thiophene-4,5-diones and subsequent transformation to benzo[*a*]thieno[3,2-*c*]phenazines.
Gaurav Shukla, Abhijeet Srivastava, and **Maya Shankar Singh**, *J. Org. Chem.* **2018**, *83*, 2173-2181. (ACS; IF: 4.849)

152. Brønsted acid-catalyzed metal-free one-pot synthesis of benzimidazoles via [4+1] heteroannulation of ortho-phenylenediamines with ▪-oxodithioesters.

Abhijeet Srivastava, Gaurav Shukla, Dhananjay Yadav, and **Maya Shankar Singh**, *ARKIVOC*, **2018**, (*ii*), 81-89. (Commemorative issue on the occasion of 65th anniversary of Professor Kenneth K. Laali)

2017

151. Access to Fully Substituted Thiazoles and 2,3-Dihydrothiazoles via Copper-Catalyzed [4+1] Heterocyclization of α-(N-hydroxy/aryl)imino-β-oxodithioesters with α-Diazocarbonyls.
Abhijeet Srivastava, Gaurav Shukla, Dhananjay Yadav, and **Maya Shankar Singh**, *J. Org. Chem.* **2017**, *82*, 10846-10854. (ACS; IF: 4.849)

150. Dithioester-enabled chemodivergent synthesis of functionalized acids, amides and isothiazoles: selective C-C bond cleavage and C-O/C-N/C-S bond formations under metal- and catalyst-free conditions.
Sonam Soni, Suvajit Koley and **Maya Shankar Singh**, *Tetrahedron Lett.* **2017**, *58*, 2512-2516. (Elsevier; IF: 2.193)

149. *p*-TSA-Catalyzed Metal-Free Formal [4 + 1] Heteroannulation via N-H/O-H/S-H Functionalization: One-Pot Access to 2-Aryl/Hetaryl/Alkyl Benzazole Derivatives.
Abhijeet Srivastava, Gaurav Shukla and **Maya Shankar Singh**, *Tetrahedron* **2017**, *73*, 879-887. (Elsevier; IF: 2.641)

2016

148. Switching selectivity of α-enolic dithioesters: One pot direct access to functionalized 1, 2- and 1, 3-dithioles.
Suvajit Koley, Tanmoy cahanda, Subhasis Samai and **Maya Shankar Singh**, *J. Org. Chem.* **2016**, *81*, 11594-11602. (ACS; IF: 4.785)

147. Developments toward the synthesis and application of 3-hydroxyindanones.
Tanmoy Chanda and **Maya Shankar Singh**, *Org. Biomol. Chem*. **2016**, *14*, 8895-8910. (RSC; IF: 3.562)

146. Chemo- and regio-selective synthesis of hexacyclic indeno-fused coumarins via domino Diels-Alder dimerization/Baeyer-Villiger oxidation.
Tanmoy Chanda, Sushobhan Chowdhury, Suvajit Koley, and **Maya Shankar Singh**, *Tetrahedron* **2016**, *72*, 5903-5908. (Elsevier; IF: 2.803)

145. Advances of azide-alkyne cycloaddition-click chemistry over the recent decade.
Maya Shankar Singh, Sushobhan Chowdhury, Suvajit Koley, *Tetrahedron*, **2016**, *72*, 5257-5283. (Elsevier; IF: 2.803)

144. *p*-TSA/Base promoted propargylation/cyclization of *β*-ketothioamides for the regioselective synthesis of highly substituted (hydro)thiophenes.
Ganesh Chandra Nandi and **Maya Shankar Singh**, *J. Org. Chem*. **2016**, *81*, 5824-5836. (ACS; IF: 4.785)

143. Metal and Catalyst-Free, Formal [4 + 1] Annulation via Tandem C=O/C=S Functionalization: One Pot Access to 3, 5-Disubstituted/Annulated Isothiazoles.
Gaurav Shukla, Abhijeet Srivastava, and **Maya Shankar Singh**, *Org. Lett*. **2016**, *18*, 2451-2454. (ACS; IF: 6.364)

142. Acid-controlled chemodivergent synthesis of three differently substituted quinolines via site-selective [4+2] annulation of *ortho*-aminoaryl ketones with α-enolic dithioesters.

Suvajit Koley, Tanmoy Chanda, B. Janaki Ramulu, Sushobhan Chowdhury, Namrata Anand and **Maya Shankar Singh**, *Adv. Synth. Catal.* **2016**, *358*, 1195-1201. (Wiley-VCH; IF: 5.663)

141. Progress in 1,3-dipolar cycloadditions in the recent decade: an update to strategic development towards the arsenal of organic synthesis.
Maya Shankar Singh, Sushobhan Chowdhury and Suvajit Koley, *Tetrahedron*, **2016**, *72*, 1603-1644. (Elsevier; IF: 2.803)

140. Metal-Free Brønsted acid mediated Direct Synthesis of Fully Substituted Thiophenes via Chemo- and Regioselective Intramolecular Cyclization of α,α'-Bis(β-oxodithioesters) at Room Temperature.
B. Janaki Ramulu, Suvajit Koley and **Maya Shankar Singh**, *Org. Biomol. Chem*. **2016**, *14*, 434-439. (RSC; IF: 3.562)

139. Solvent-free one-pot efficient and highly regioselective access to functionalized thiazolopyridones from α-enolic dithioesters.
Anugula Nagaraju, B. Janaki Ramulu, Gaurav Shukla, Abhijeet Srivastava, Girijesh Kumar Verma, and **Maya Shankar Singh**, *ARKIVOC*, **2016**, (ii) 42-52.
(Commemorative Issue in Honour of Dr. J. S. Yadav on the occasion of his outstanding contribution to Synthetic Organic Chemistry)

2015

138. Iodine Mediated Copper-Catalyzed Highly Efficient α-C(sp^2)-Thiomethylation of α-Oxoketene Dithioacetals with Dimethyl Sulfoxide in One-Pot.
Gaurav Shukla, Abhijeet Srivastava, Anugula Nagaraju, Keshav Raghuvanshi and **Maya Shankar Singh**, *Adv. Synth. Catal.* **2015**, *357*, 3969-3976. (Wiley-VCH; IF: 5.663)

137. Metal-free aerobic one-pot synthesis of substituted/annulated quinolines from alcohols via indirect Friedländer annulation.
Namrata Anand, Suvajit Koley, B. Janaki Ramulu and **Maya Shankar Singh**, *Org. Biomol. Chem*. **2015**, *13*, 9570-9574. (RSC; IF: 3.562)

136. In/I_2 Mediated Functional Group Transformation: A Direct Approach towards the Selective Conversion of Dithioester to Ester.
Sushobhan Chowdhury, Suvajit Koley, Tanmoy Chanda and **Maya Shankar Singh**, *Tetrahedron Lett.* **2015**, *56*, 5553-5556. (Elsevier; IF: 2.397)

135. Thionyl Chloride Mediated Dehydroxylation of 3-Hydroxyindanones to Indenones.
Tanmoy Chanda, Sushobhan Choudhury, Suvajit Koley, Namrata Anand, **Maya Shankar Singh**, *Tetrahedron Lett*. **2015**, *56,* 4603-4606. (Elsevier; IF: 2.397)

134. A facile and highly convergent approach to thiazolo[3,2-*a*] pyridines via multicomponent domino reaction under metal-free and solvent-free conditions: Formation of multiple C-C, C-N, and C-S bonds in one-pot.
Anugula Nagaraju, B. Janaki Ramulu, Gaurav Shukla, Abhijeet Srivastava, Girijesh Kumar Verma, Keshav Raghuvanshi and **Maya Shankar Singh**, *Tetrahedron* **2015**, *71*, 3422-3427. (Elsevier; IF: 2.817)

133. I_2-Mediated dehydroiodinative annulation of *S*-allylated α-enolicdithioesters: rapid and sustainable direct access to 2-alkylidine-1,3-dithiolanes at room temperature.

B. Janaki Ramulu, Sushobhan Chowdhury, Tanmoy Chanda, Anugula Nagaraju, Suvajit Koley, Namrata Anand, **Maya Shankar Singh**, *Synthesis* **2015**, *47*, 1510-1518. (Elsevier; IF: 2.443)

132. Copper-catalyzed site-selective S-S and C-C homocoupling of α-enolic dithioesters: straightforward and efficient access to 1,2-dithiols.
B. Janaki Ramulu, Anugula Nagaraju, Sushobhan Chowdhury, Suvajit Koley and **Maya Shankar Singh**, *Tetrahedron Lett.* **2015**, *56*, 2593-2596. (Elsevier; IF: 2.397)

131. Organoindium(0) Mediated Csp^3-S Cross-coupling/migratory allenylation/thioannulation cascade: expedient synthesis of highly substituted thiophene frameworks.
Sushobhan Chowdhury, Tanmoy Chanda, Suvajit Koley, B. Janaki Ramulu, Raymond C. F. Jones and **Maya Shankar Singh**, *Tetrahedron* **2015**, *71*, 1844-1850. (Elsevier; IF: 2.817)

130. Metal·free reagent dependent S-S and C-C homocoupling of α-enolic dithioesters at room temperature: Direct access to fully substituted symmetrical thiophenes *via* chemoselective Paal-Knorr approach.
B. Janaki Ramulu, Anugula Nagaraju, Sushobhan Chowdhury, Suvajit Koley and Maya Shankar Singh, *Adv. Synth. Catal*. **2015**, *357*, 530-538. (Wiley-VCH; IF: 5.542)

129. Catalyst-free four-component domino reactions in water-PEG- 400: Highly efficient and convergent approach to thiazoloquinoline scaffolds *via* concomitant formation of multiple C-C/C-N/C-S bonds in one-pot.
Anugula Nagaraju, B. Janaki Ramulu, Gaurav Shukla, Abhijeet Srivastava, Girijesh Kumar Verma, Keshav Raghuvanshi and **Maya Shankar Singh**, *Green Chem*. **2015**, *17*, 950-958. (RSC; IF: 6.852)

128. Synthesis of 3-Hydroxyindanones via Organocatalyzed *trans*-Selective Aldolization of *ortho*-Diacylbenzenes: Thionyl Chloride Mediated Dehydroxylation Leading to Indenones.
Tanmoy Chanda, Sushobhan Chowdhury, Namrata Anand, Suvajit Koley, Ashutosh Gupta and **Maya Shankar Singh**, *Tetrahedron Lett.* **2015**, *56*, 981-985. (Elsevier; IF: 2.397)

127. Ligand- and Base-Free Cu^{II}-Mediated Selective S-Arylation of α-Enolic dithioesters via Chan-Lam Coupling at Room Temperature.
Suvajit Koley, Sushobhan Chowdhury, Tanmoy Chanda, B. Janaki Ramulu, Namrata Anand and **Maya Shankar Singh**, *Eur. J. Org. Chem*. **2015**, 409-416. (Wiley-VCH; IF: 3.154)

126. $CuSO_4$-D-glucose an inexpensive and eco-efficient catalytic system: direct access to diverse quinolines through modified Friedländer approach involving S_NAr/reduction/annulation cascade in one-pot.
Namrata Anand, Tanmoy Chanda, Suvajit Koley, Sushobhan Chowdhury and **Maya Shankar Singh**, *RSC Advances*, **2015**, *5*, 7654-7660. (RSC; IF: 3.708)

125. Lewis-Acid Mediated Three-Component One-Flask Regioselective Synthesis of Densely Functionalized 4-Amino-1,2-dihydropyridines via Cascade Knoevenagel/Michael/Cyclization Sequence.
Suvajit Koley, Sushobhan Chowdhury, Tanmoy Chanda, B. Janaki Ramulu, Subhasis Samai, Lerato Motisa, and **Maya Shankar Singh**, *Tetrahedron* **2015**, *71*, 301-307. (Elsevier; IF: 2.817)

2014

124. Regioselective Synthesis of Dihydrothiophene and Thiopyran Frameworks *via* Catalyst-Controlled Intramolecular C_γ/C_δ–S Fusion of α-Allyl-β'-oxodithioesters.

Sushobhan Chowdhury, Tanmoy Chanda, Suvajit Koley, Namrata Anand and Maya Shankar Singh, *Org. Lett*. **2014**, *16*, 5536-5539. (ACS; IF: 6.324)

123. *ortho*-Quinone methide (*o*-QM): a highly reactive, ephemeral and versatile intermediate in organic synthesis. (***Review Article***)
Maya Shankar Singh, Anugula Nagaraju, Namrata Anand and Sushobhan Chowdhury, *RSC Adv*. **2014**, *4*, 55924-55959. (RSC; IF: 3.708)

122. Lewis Acid Promoted Construction of Chromen-4-one and Isoflavone Scaffolds via Domino Friedel-Crafts Acylation/Allan-Robinson Reaction under Solvent-free Conditions.
Tanmoy Chanda, Sushobhan Chowdhury, Suvajit Koley, **Maya Shankar Singh**, *Org. Biomol. Chem.* **2014**, *12*, 9216-9222. (RSC; IF: 3.487)

121. Iron Promoted Domino Annulation of α-Enolicdithioesters with Ninhydrin Under Solvent-Free Conditions: Regioselective Direct Access to Indeno[1,2-*b*]thiophenes.
Suvajit Koley, Sushobhan Chowdhury, Tanmoy Chanda, B. Janaki Ramulu, Ganesh Chandra Nandi, **Maya Shankar Singh**, *Eur. J. Org. Chem.* **2014**, 5501-5508. (Wiley-VCH; IF: 3.344)

120. DMAP-promoted cascade C-S/C-N bonds formation approach to 1,3-thiazolidin-4-ones *via* annulation of β-ketothioamides with α-halocarboxylic acids at room temperature.
Girijesh K. Verma, Gaurav Shukla, Anugula Nagaraju, Abhijeet Srivastava, **Maya Shankar Singh**, *Tetrahedron* **2014**, *70*, 6980-6984. (Elsevier; IF: 2.817)

119. $In(OTf)_3$-mediated dehydrative annulation of β-ketothioamides with phenylglyoxal: rapid one-pot direct access to diversely functionalized pyrrol-2-thiones at room temperature.
Girijesh Kumar Verma, Gaurav Shukla, Anugula Nagaraju, Abhijeet Srivastava, **Maya Shankar Singh**, *Tetrahedron Lett*. **2014**, *55*, 5182-5185. (Elsevier; IF: 2.391)

118. $In(OTf)_3$-Catalysed One-pot Versatile Pyrrole Synthesis through Domino Annulation of α-Oxoketene-*N*,*S*-acetals with Nitroolefins.
Abhijeet Srivastava, Gaurav Shukla, Anugula Nagaraju, Girijesh Kumar Verma, Keshav Raghuvanshi, Raymond C. F. Jones, and **Maya Shankar Singh**, *Org. Biomol. Chem.* **2014**, *12*, 5484-5491. (RSC; IF: 3.487)

117. Regioselectivity in the ring opening of epoxides: A Metal-Free Cascade C-S/C-O Bonds Formation Approach to 1,3-Oxathiolan-2-ylidenes via Heteroannulation of α-Enolic dithioesters at Room Temperature.
Gaurav Shukla, Anugula Nagaraju, Abhijeet Srivastava, Girijesh Kumar Verma, Keshav Raghuvanshi, **Maya Shankar Singh**, *Synthesis* **2014**, *46*, 1815-1822. (George Thieme-Verlag; IF: 2.500). **Highlighted** in *SYNFACTS* **2014**, *10* (09), 912.

116. Easy access to α-hydroxyimino-β- oxodithioesters and application towards the synthesis of diverse 1,4-thiazine-3-ones via reduction/annulation cascade
Anugula Nagaraju, Gaurav Shukla, Abhijeet Srivastava, B. Janaki Ramulu, Girijesh Kumar Verma, Keshav Raghuvanshi and **Maya Shankar Singh**, *Tetrahedron* **2014**, *70*, 3740-3746. (Elsevier; IF: 2.803)

115. A facile and straightforward practical synthesis of 1,2,3-thiadiazoles from α-enolic dithioesters *via* nitrosation/reduction/diazotization/cyclization cascade in one-pot.
Anugula Nagaraju, B. Janaki Ramulu, Gaurav Shukla, Abhijeet Srivastava, Girijesh Kumar Verma, Keshav Raghuvanshi, **Maya Shankar Singh**, *Tetrahedron Lett*. **2014**, *55*, 2430-2433 (Elsevier; IF: 2.397)

114. Indium(0) Mediated C(sp^3)-S/O Cross-coupling Approach Towards the Regioselective Alkylation of α–Enolic esters/dithioesters: A Mechanistic Insight.
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Date: 31-08-2018 Signature

Place: Varanasi