

## Publications

- Rajesh Kumar, Saima, **Amit Shard**, Nitin H. Andhare, Richa & Arun K. Sinha. Thiol–Ene “Click” Reaction Triggered by Neutral Ionic Liquid: The “Ambiphilic” Character of [hmim] Br in the Regioselective Nucleophilic Hydrothiolation. *Angewandte Chemie International Edition*, 54: 828–832 (2015). DOI: 10.1002/anie.201408721
- **Amit Shard**, Rajesh Kumar, Nidhi Sharma & Arun K. Sinha. Amino acid and water-driven tunable green protocol to access S–S/C–S bonds via aerobic oxidative coupling and hydrothiolation. *RSC Advances*, 4: 33399–33407 (2014). DOI: 10.1039/C4RA02909G
- Rajesh Kumar, Nitin H Andhare, **Amit Shard**, Richa & Arun K Sinha. Multicomponent diversity-oriented synthesis of symmetrical and unsymmetrical 1,4-dihydropyridines in recyclable glycine nitrate (GlyNO<sub>3</sub>) ionic liquid: a mechanistic insight using Q-TOF, ESI-MS/MS. *RSC Adv.*, 4: 19111–19121 (2014). DOI: 10.1039/C4RA02169J
- Rajesh Kumar, Richa , Nitin H. Andhare , **Amit Shard** & Arun K. Sinha. Water compatible multicomponent cascade Suzuki/Heck–Aldol, Suzuki–Aldol–Suzuki, and Aldol–Suzuki–Aldol Reactions: An ecofriendly paradigm for multiple carbon–carbon bond formation in one pot. *Chemistry-A European Journal*, 19: 14798–14803 (2013). DOI: 10.1002/chem.201303069
- Naina Sharma , Dinesh Mohanakrishnan, **Amit Shard**, Abhishek Sharma & Arun K. Sinha and Dinkar Sahal. Stilbene–Chalcone hybrids: Design, synthesis, and evaluation as a new class of antimalarial scaffolds that trigger cell death through stage specific apoptosis. *Journal of Medicinal Chemistry*, 55: 297–311 (2012). DOI: 10.1021/jm201216y
- Rakesh Kumar, Prabha Sharma, **Amit Shard**, Dhananjay Kumar Tewary, Gireesh Nadda, & Arun Kumar Sinha. Chalcones as promising pesticidal agents against diamondback moth (*Plutella xylostella*): microwave-assisted synthesis and structure–activity relationship. *Medicinal Chemistry Research*, 21: 922–931 (2012). DOI 10.1007/s00044-011-9602-8
- **Amit Shard**, Naina Sharma, Richa Bharti, Sumit Dadhwal, Rajesh Kumar & Arun K. Sinha. Tandem Heck/Decarboxylation/Heck strategy: Protecting-group-free synthesis of symmetric and unsymmetric hydroxylated stilbenoids. *Angewandte Chemie International Edition*, 51: 12250–12253 (2012). DOI: 10.1002/anie.201206346
- Rakesh Kumar, **Amit Shard**, Richa Bharti, Yogesh Thopate & Arun Kumar Sinha: Palladium-catalyzed dehydrative Heck olefination of secondary aryl alcohols in ionic liquids: Towards a waste-free strategy for tandem synthesis of stilbenoids. *Angewandte Chemie International Edition*, 51: 2636–2639 (2012). DOI:10.1002/anie.201107261

- Rajesh Kumar, Nandini Sharma, Upendra K. Sharma, **Amit Shard** & Arun K. Sinha. First metal and base-free selective oxidative coupling of thiols in neat ionic liquids: NMR probed "Ambiphilic" character of neutral [hmim]Br towards atom-efficient synthesis of disulfides. *Advanced Synthesis & Catalysis*, 35: 2107–2112 (2012). DOI: 10.1002/adsc.201200190
- Abhishek Sharma, Naina Sharma, Rakesh Kumar, **Amit Shard** & Arun K. Sinha. Direct olefination of benzaldehydes into hydroxy functionalized oligo (p-phenylenevinylene)s via Pd-catalyzed heterodomino Knoevenagel-decarboxylation-Heck sequence and its application for fluoride sensing p-conjugated units. *Chemical Communications*, 46: 3283-3285 (2010). DOI:10.1039/C001980A
- Abhishek Sharma, Naina Sharma, **Amit Shard**, Rakesh Kumar, Dinesh Mohanakrishnan, Saima, Arun K. Sinha & Dinkar Sahal. Tandem allylic oxidation condensation/esterification catalyzed by silica gel: An expeditious approach towards antimalarial diaryldienones and enones from natural methoxylated phenylpropenes. *Organic and Biomolecular Chemistry*, 9, 5211- 5219 (2011). DOI: 10.1039/C1OB05293D
- Naina Sharma, Abhishek Sharma, **Amit Shard**, Rakesh Kumar, Saima & Arun K. Sinha. Pd-catalyzed orthogonal Knoevenagel/Perkin Condensation– decarboxylation– Heck/Suzuki sequences: Tandem transformations of benzaldehydes into hydroxy-functionalized antidiabetic Stilbene–Cinnamoyl hybrids and asymmetric distyrylbenzenes. *Chemistry- A European Journal*, 17, 10350–10356 (2011). DOI: 10.1002/chem.201101174
- Naina Sharma, Abhishek Sharma, Rakesh Kumar, **Amit Shard** & Arun K. Sinha. One-pot two-step oxidative cleavage of 1,2-arylalkenes to aryl ketones instead of arylaldehydes in an aqueous medium: A complementary approach to ozonolysis. *European Journal of Organic Chemistry*, 2010, 6025– 6032 (2010). DOI: 10.1002/ejoc.201000672
- Arun K. Sinha, Naina Sharma, **Amit Shard**, Abhishek Sharma, Rakesh Kumar & Upendra K. Sharma. Green methodologies in synthesis and natural product chemistry of phenolic compounds. *Indian Journal of Chemistry-B*, 48B, 1771-1779 (2009).