Dr. Sandip B. Bharate

c) Statement of research achievements, if any, on which any award has already been received by the applicant. Please also upload brief citation(s) on the research work(s) for which the applicant has already received the award(s) (not to exceed 2000 words)

Award	Research achievements	Citation
NASI Platinum Jubilee Young Scientist Award 2015	 Significant research efforts on natural products driven drug discovery: The NCE leads were discovered via medicinal chemistry on NP scaffolds (publications listed below, sr no 1, 2, 5,7,8). The identified leads were validated in animal models. New synthetic methods were developed for medicinally important scaffolds (publications listed below, sr no 3,4,6) 	THE NATIONAL ACADEMY OF SCIENCES, INDIA NASI-YOUNG SCIENTIST PLATINUM
	 Jain SK; Singh S; Khajuria A; Guru SK; Joshi P; Meena S; Nadkarni J; Singh A; Bharate SS; Bhushan S; Bharate SB*; Vishwakarma RA. Pyrano-isochromanones as IL-6 inhibitors: Synthesis, in-vitro and in-vivo anti-arthritic activity. <i>J. Med. Chem.</i>, 2014, <i>57</i>, 7085–7097 Mahale S; Bharate SB;* Manda S; Joshi P; Bharate SS; Jenkins PR; Vishwakarma RA; Chaudhuri B. Biphenyl-4-carboxylic acid [2-(1H-indol-3-yl)-ethyl]-methylamide (CA224), a non-planar analog of fascaplysin inhibits Cdk4 and tubulin polymerization: Evaluation of in 	DR. BHARATE SANDIP BIBISHAN Senior Scientist, Medicinal Chemistry Division, CSIR- Indian Institute of Integrative Medicine, Jammu, for his research work in the field of Chemical Sciences. BHUBANESWAR December 8, 2015 The award conferred for developing new methods for medicinally important compounds/ natural product scaffolds.

- vitro and in vivo anticancer activity. *J. Med. Chem.*, 2014, *57*, 9658-9672.
- 3. Mudududdla R; Sharma R; Abbat S; Bharatam PV; Vishwakarma RA; **Bharate SB*** Synthesis of 2-phenylnaphthalenes from styryl-2-methoxybenzenes. *Chem. Commun.*, **2014**, *50*, 12076-12079
- 4. **Bharate SB**;* Mudududdla R; Bharate JB; Battini N; Battula S; Yadav RR; Singh B; Vishwakarma RA. Tandem one-pot synthesis of flavans by recyclable silica-HClO₄ catalyzed Knoevenagel condensation and [4+2]-Diels-Alder cycloaddition. *Org. Biomol. Chem.*, 2012, 10, 5143–5150
- Bharate SB;* Manda S; Joshi P; Singh B; Vishwakarma RA. Total synthesis and anticholinesterase activity of marine-derived bisindole alkaloid fascaplysin. *Med. Chem. Commun.*, 2012, *3*, 1098-1103
- Mudududdla R; Jain SK; Bharate JB; Gupta AP; Singh B; Vishwakarma RA; **Bharate SB***.
 Ortho-Amidoalkylation of phenols via tandem one-pot approach involving oxazine intermediate. *J. Org. Chem.*, 2012, *77*, 8821-8827
- 7. **Bharate SB;*** Yadav RR; Khan SI; Tekwani BL; Jacob MR; Khan IA; Vishwakarma RA. Meridianin G and its analogs as antimalarial agents. *Med. Chem. Commun.*, 2013, 4, 1042-1048

8. Jain SK; Pathania AS; Meena S; Sharma R; Sharma A; Singh B; Gupta BD; Bhushan S; **Bharate SB;*** Vishwakarma RA. Semisynthesis of Mallotus B from Rottlerin: Evaluation of Cytotoxicity and Apoptosis-inducing Activity. *J. Nat. Prod.*, 2013, *76*, 1724–1730

CSIR Young Scientist Award 2016

Medicinal chemistry efforts to discover kinase inhibitors (Publication, number 1,2) and development of new synthetic methods (publications, sr no. 3,4).

- 1. Mahale S; **Bharate SB;*** Manda S; Joshi P; Bharate SS; Jenkins PR; Vishwakarma RA; Chaudhuri B. Biphenyl-4-carboxylic acid [2-(1H-indol-3-yl)-ethyl]-methylamide (CA224), a non-planar analog of fascaplysin inhibits Cdk4 and tubulin polymerization: Evaluation of in vitro and in vivo anticancer activity. *J. Med. Chem.*, 2014, *57*, 9658-9672.
- Yadav RR; Sharma S; Joshi P; Wani A; Vishwakarma RA; Kumar A; **Bharate SB*** Meridianin derivatives as potent Dyrk1A inhibitors and neuroprotective agents. *Bioorg. Med. Chem. Lett.* 2015, *25*, 2948-2952
- 3. Bharate JB; Abbat S; Sharma R; Bharatam PV; Vishwakarma RA; **Bharate SB*** Cobalt (II) catalyzed C(sp)-H bond functionalization of alkynes with phenylhydrazines: A facile access to diaryl 1,2-diketones. *Org. Biomol. Chem.*, 2015, *13*, 5235-5242

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद, भारत COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, INDIA सीएसआईआर युवा वैज्ञानिक पुरस्कार CSIR YOUNG SCIENTIST AWARD

> 2016 प्रशस्ति/CITATION

डॉ. संदिप बी भराटे / Dr Sandip B Bharate

रसायन विज्ञान में वर्ष 2016 का सीएसआईआर युवा वैज्ञानिक पुरस्कार सीएसआईआर-भारतीय समवेत औषध संस्थान, जम्मू के डॉ. सर्दिप बी भराटे को नए काइनेज़ निरोधकों की खोज करने और औषधीय महत्व वाले महत्वपूर्ण विषमचक्रीय अणुओं के लिए संश्लिप्ट नयाचार विकसित करने हेतु उनके महत्वपूर्ण योगदान के लिए प्रदान किया गया है।

The CSIR Young Scientist Award for the year 2016 in Chemical Sciences has been awarded to Dr Sandip B Bharate of CSIR - Indian Institute of Integrative Medicine, Jammu, for his significant contributions towards discovering new kinase inhibitors and also for developing synthetic protocols for important heterocyclic molecules of medicinal importance.

भूकाडी (हर्ष वर्धन)

उपाध्यक्ष / Vice President वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद और मंत्री विज्ञान एवं प्रौद्योगिकी और पथ्थी विज्ञान

वज्ञानक तथा आधारक अनुसर्वाण भारप शार मंत्री, विज्ञान एवं ग्रीधोगिकी और पृथ्वी विज्ञान Council of Scientific A Industrial Research and Minister for Science & Technology and Earth Sciences पियोश सहनी)

महानिदेशक / Director General वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद एवं सचिव, वैज्ञानिक और औद्योगिक अनुसंधान विधान Council of Scientific & Industrial Research and Secretary Denaturent of Scientific & Industrial Research

नई दिल्ली, 26 सितम्बर 2016 New Delhi, 26 September 2016

	4. Bharate JB; Abbat S; Bharatam PV; Vishwakarma RA; Bharate SB* CuBr catalyzed aerobic oxidative coupling of 2-aminopyridines with cinnamaldehydes: Direct access to 3-formyl-2-phenyl-imidazo[1,2-a]pyridines. <i>Org. Biomol. Chem.</i> , 2015, <i>13</i> , 7790-7794	
Scientist	 For the discovery, preclinical development and out-licensing the Saffron based nutraceutical product to the industry. Bharate SS; Kumar V; Singh GD; Singh A; Gupta M; Singh D; Kumar A; Vishwakarma RA; Bharate SB*. Preclinical development of <i>Crocus sativus</i> based botanical lead IIIM-141 for Alzheimer's disease: Chemical standardization, efficacy, formulation development, pharmacokinetics and safety pharmacology. <i>ACS Omega</i>, 2018, 3, 9572–9585 Batarseh YS; Bharate SS; Kumar V; Kumar A; Vishwakarma RA; Bharate SB; Kaddoumi A. <i>Crocus sativus</i> Extract Tightens the Blood-Brain Barrier, Reduces Amyloid β Load and Related Toxicity in 5XFAD Mice. <i>ACS Chem. Neurosci.</i>, 2017, 8, 1756-1766 	Winner of OPPI Young Scientist Award 2019 9 messages DG OPPI <q@midiaoppi.com> Thu, Jul 18, 2019 at 12:29 PM To: "sbharate@ilim ac.in" <sbharate@ilim <fwdadnav.welling.welli<="" <fwdadnav.welling@svkm.ac.in"="" ac.in"="" td=""></sbharate@ilim></q@midiaoppi.com>