KAPIL DEV BIODATA

1. Name — Dr. Kapil Dev,
2. Designation — Scientist, Phytochemistry Division,
   Institute — CSIR-Central Institute of Medicinal & Aromatic Plants
   Lucknow, India, PIN: 226015.
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4. Institution**:** CSIR-Central Institute of Medicinal & Aromatic Plants (CSIR-CIMAP), Lucknow, India

5. Academic Qualification (Undergraduate Onwards)

S. No.	Degree	Year	Subject	University/Institution
1.	B.Sc.	2007	Chemistry, Physics, Mathematics	University of Lucknow, Lucknow
2.	M.Sc.	2009	Pharmaceutical Chemistry	University of Lucknow, Lucknow
3.	Ph.D.	2017	Chemical Sciences	CSIR-Central Drug Research Institute, Lucknow/ AcSIR

9. Work experience (in chronological order)

S. No.	Positions held	Name of the Institute	From	To
1.	Scientist	CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow, India	27-Nov-2019	Till Date
2.	Postdoctoral Research Fellow	Yunnan University, Kunming, China	05-Mar-2019	26-Nov-2019
3.	Research Scientist	Jubilant Chemsys Pvt. Ltd., Noida, India	01-Mar-2017	25-Feb-2019
4.	Senior Research Fellow	CSIR-Central Drug Research Institute, Lucknow, India	20-Jul-2014	31-Jan-2017
5.	Junior Research Fellow	CSIR-Central Drug Research Institute, Lucknow, India	20-Jul-2012	19-Jul-2014
6.	Project Assistant-II	CSIR-Central Drug Research Institute, Lucknow, India	03-Mar-2010	19-Jul-2012

10. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S. No	Name of Award	Awarding Agency	Year
1.	Incentive Awards for US patent & Technology	CSIR-CDRI, Lucknow	2020
2.	Technology Award	CSIR-CDRI, Lucknow	2019
3.	Spot Award	Jubilant Chemsys Pvt. Ltd., Noida	2018
4.	Best Poster Award	HNBGU, Dehradun, India	2012
5.	CSIR-NET-JRF	CSIR, New Delhi, India	Dec. 2011

11. Publications *(List of papers published in SCI Journals, in year wise descending order).*

International: 27 **National:** 01

S. No	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	Akansha Mishra, Khushbu Sharma, Jyotsana Pandey, **Kapil Dev**, Sleman Kadan, Mahendra Sahai, Ishbal Ahmad, Arvind K. Srivastava, Akhilesh K. Tamrakar, Hilal Zaid, Rakesh Maurya	Tinosporaside from *Tinospora cordifolia* Encourages Skeletal Muscle Glucose Transport through Both PI-3-Kinase- and AMPK-Dependent Mechanisms	*Molecules*,	28(2)	483	2023
2.	**Kapil Dev,** Shraddha Srivastava, Rohit Bisht	Chemical and Pharmacological Profile of *Psidium guajava*: A Mini Review	*Indian Forester Journal*	148 (4)	245-255	2022
3.	Pandey, J.; **Dev, K.**; Chattopadhyay, S.; Kadan, S.; Sharma, T.; Sanyal, S.;	*β*-Sitosterol-D-Glucopyranoside Mimics Estrogenic Properties and Stimulates Glucose Utilization in Skeletal Muscle Cells	Molecules	26(11)	3129	2021

	Siddiqi, M. I.; Zaid, I.; & Tamrakar, A.					
4.	Trivedi, R.; Adhikary, S.; Kothari, P.; Ahmad, N.; Mittapelly, N.; Pandey, G.; Shukla, M.; Kumar, S.; **Dev, K.;** Choudhary, D.; Maurya, R.; Lal, J.; Mishra, P. R.	Self-emulsifying formulation of *Spinacia oleracea* reduces the dose and escalates bioavailability of bioactive compounds to accelerate fracture repair in rats	Clinical Phytoscience	6	2-15	2020
5.	Singh, A.; Singh, P.; Kumar, B.; Kumar, S.; **Dev, K.**; Maurya, R.	Detection of flavonoids from *Spinacia oleracea* leaves using HPLC-ESI-QTOF-MS/MS and UPLCQqQLIT-MS/MS techniques	Natural Products Research	33	2253-2256	2019
6.	**Dev, K.**; Kumar, P.; Sharma, K.; Sahai, M.; Maurya, R.	New lignan glycosides from *Cissus quadrangularis* stems.	Natural Products Research	33	233-238	2019
7.	Choudhary, D.; Kothari, P.; Tripathi, A. K.; Singh, S.; Adhikary, S.; Ahmad, N.; Kumar, S.; **Dev, K.**; Mishra, V. K.; Shukla, S.; Maurya, R.; Mishra, P. R.; Trivedi, R.	*Spinacia oleracea* extract attenuates disease progression and sub-chondral bone changes in monosodium iodoacetate induced osteoarthritis in rats.	BMC Complementary and Alternative Medicine	18	1-16	2018

8.	Maurya S. W.; **Dev, K.**; Prakash, R.; John, A. A.; Siddiqui, I. R.; Singh, D.; Maurya, R.	Design and synthesis of indolyl chalcone analogues and evaluation of their osteogenic activity.	Journal of Pharmacology and Pharmaceutical Research	1	1-7	2018
9.	**Dev, K.**; Ramakrishna , E.; Kothari, P.; Tripathi, A. K.; Trivedi, R. and Maurya, R.	Phytochemical investigation of *Kigelia pinnata* leaves and identification of osteogenic agents;	Medicinal Chemistry Research	26	940-940	2017
10.	Singh, K. B.; Dixit, M.; **Dev, K.**; Rakesh Maurya; and Divya Singh.	Formononetin, a methoxy isoflavone, enhances bone regeneration in a mouse model of cortical bone defect.	British Journal of Nutrition	117	1511-1522	2017
11.	**Dev**, **K.**; Ramakrishna , E.; Maurya, S. W.; Siddiqui, I. R.; Kant, R. and Maurya, R.	Ugi three-component reaction of alcohols, amines and isocyanides: A new approach to the synthesis of cyclic amidines	Tetrahedron Letters	58	1202-1206	2017
12.	**Dev**, **K.**; Ramakrishna , E.; Maurya, S. W.; Siddiqui, I. R. and Maurya, R.	Hypervalent iodine (III)-mediated oxidation of aryl sulfonylhydrazones: A facile synthesis of *N*-aroyl-*N*'-acyl arylsulfonylhydrazides	Tetrahedron Letters	58	570-573	2017
13.	Kumar, P.; Kushwaha, P.; Ahmad,	Design and synthesis of dalbergin analogues and	Bioorganic & Medicinal Chemistry Letters	27	1765-1775	2017

	N.; Maurya, S. W.; **Dev, K.**; Khedgikar, V.; Siddiqui, I. R.; Trivedi, R. and Maurya, R.	the evaluation of anti-osteoporotic activity				
14.	Maurya, S. W.; **Dev, K.**; Singh, K. B.; Rai, R.; Siddiqui, I. R.; Singh, D.; Maurya, R.	Synthesis and biological evaluation of heterocyclic analogues of pregnenolone as novel anti-osteoporotic agents	Bioorganic & Medicinal Chemistry Letters	27	1390-1396	2017
15.	Porwal, K.; Pal, S.; **Dev, K.**; China, S. P.; Kumar, Y.; Singh, C.; Barbhuyan, T.; Sinha, N.; Sanyal, S.; Trivedi, A. K.; Maurya, R. and Chattopadhyay, N.	Guava fruit extract and its triterpene constituents have osteoanabolic effect: stimulation of osteoblast differentiation by activation of mitochondrial respiration via the Wnt/β-catenin signalling	The Journal of Nutritional Biochemistry	44	22-34	2017
16.	Adhikary, S.; Choudhary, D.; Ahmad, N.; Kumar, S.; **Dev, K.**; Mittapelly, N.; Pandey, G.; Mishra, P. R.;	Dried and free flowing granules of *Spinacia oleracea* accelerate bone regeneration and alleviate post-menopausal osteoporosis	Menopause	24	686-698	2017

	Maurya, R.; Trivedi, R.,					
17.	Gautam, J.; Khedgikar, V.; Kushwaha, P.; Choudhary, D.; Nagar, G. K.; **Dev, K.**; Dixit, P.; Singh, D.; Maurya, R.; Trivedi, R.	Formononetin, an isoflavone, activates AMPK/β-catenin signaling to inhibit adipogenesis and rescues C57BL/6 mice against high fat diet induced obesity and bone loss	British Journal of Nutrition	117	645-661	2017
18.	Srivastava, A.; Singh, H.; Mishra, R.; **Dev, K.**; Tandon, P.; Maurya, R.,	Structural insights, protein-ligand interactions and spectroscopic characterization of isoformononetin	Journal of Molecular Structure	1133	479-491	2017
19.	Singh, H.; Singh, S.; Srivastava, A.; Tandon, P.; Bharti, P.; Kumar, S.; **Dev, K.**; Maurya, R.	Study of hydrogen–bonding, vibrational dynamics and structure-activity relationship of genistein using spectroscopic techniques coupled with DFT	Journal of Molecular Structure	1133	929-939	2017
20.	Mittal, M.; Pal, S.; China, S. P.; Porwal, K.; **Dev, K.**; Shrivastava, R.; Raju, K. S.; Rashid, M.; Trivedi, A. K.; Sanyal, S.; Wahajuddin,	Pharmacological activation of aldehyde dehydrogenase 2 promotes osteoblast differentiation via bone morphogenetic protein-2 and induces bone anabolic effect	Toxicology and Applied Pharmacology	316	63-73	2017

	M.; Bhaduria, S.; Maurya, R.; Chattopadhyay, N.					
21.	Mansoori, M. N.; Tyagi, A. M.; Shukla, P.; Srivastava, K.; **Dev, K.**; Chillara, R.; Maurya, R.; Singh, D.	Methoxy isoflavone formononetin and isoformononetin inhibit the differentiation of Th17 cells and B-cell lymphopoesis to promote osteogenesis in estrogen-deficient bone loss conditions	Menopause	23	565-576	2016
22.	Srivastava, A.; Mishra, R.; Kumar, S.; **Dev, K.**; Tandon, P.; Maurya, R.	Molecular structure, spectral investigation (1H NMR, 13C NMR, UV–Visible, FT-IR, FT-Raman), NBO, intramolecular hydrogen bonding, chemical reactivity and first hyperpolarizability analysis of formononetin [7-hydroxy-3(4-methoxyphenyl)chromone]: A quantum chemical study	Journal of Molecular Structure	1084	55-73	2015
23.	Taneja, I.; Raju, K. S. R.; Mittal, M.; **Dev, K.**; Khan, M. F.; Maurya, R.; Wahajuddin, M.	Bioavailability, plasma protein binding and metabolic stability studies of ALDH2 activator, alda-1, using validated LC-ESI-MS/MS method in rat plasma	RSC Advances	5	54395-54402	2015
24.	**Dev, K.** and Maurya, R.	Facile synthesis of 11-aryl-6H-isoindolo[2,1-a]-indol-6-ones via	RSC Advances	5	13102-13106	2015

		hypervalent iodine(III)-promoted cascade cyclization.				
25.	Khan, M. F.; Maurya, C. K.; **Dev, K.;** Arha, D.; Rai, A. K.; Tamrakar, A. K. and Maurya, R.	Design and synthesis of lupeol analogues and their glucose uptake stimulatory effect in L6 skeletal muscle cells.	Bioorganic & Medicinal Chemistry Letters	24	2674-2679	2014
26.	Omeje, E. O.; Khan, M. P.; Osadebe, P. O.; Tewari, D.; Khan, M. F.; **Dev, K.**; Maurya, R. and Chattopadhyay, N.	Analysis of constituents of the eastern Nigeria mistletoe, *Loranthus micranthus* Linn revealed presence of new classes of osteogenic compounds.	Journal of Ethnopharmacology	151	643–651	2014
27.	**Dev**, **K.**; Khan, M. F.; Lahiri, S.; Dixit, M.; Trivedi, R.; Singh, D. and Maurya, R.	Osteogenic activity of natural diterpenoids isolated from *Cupressus sempervirens* fruits in calvarial derived osteoblast cells *via* differentiation and mineralization.	Phytomedicine	21	1794–1800	2014
28.	Yadav, D. K.; Singh, N.; **Dev**, **K.;** Sharma, R.; Sahai, M.; Palit, G. and Maurya, R.	Anti-ulcer constituents of *Annona squamosa* twigs.	Fitoterapia	82	666-675	2011

12. Detail of patents

S. No.	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency /Country	Status
1.	Formulation for the prevention and treatment of bone related disorders	Ritu Trivedi; Prabhat R. Mishra; Sulekha Adhikari; Naseer Ahmad; Dharmendra Chaudhary; Naresh Mittapally; Sudhir Kumar; **Kapil Dev**; Rakesh Maurya	10265297	23-April-2019	US patent	Granted
2.	Pharmaceutical composition for the prevention and/or treatment of bone related disorders	Ritu Trivedi; Prabhat R. Mishra; Sulekha Adhikari; Naseer Ahmad; Dharmendra Chaudhary; Naresh Mittapally; Sudhir Kumar; **Kapil Dev**; Rakesh Maurya	20180000776 (Application Number)	-	Indian Patent	Filed

13. Books Chapters

S. No	Title	Author's Name	Publisher	Year of Publication
1.	"***Glucose Transporter 4 (GLUT4) Translocation Activators from Nature***" published in Elsevier Book series entitled with **''Discovery and Development of Anti-diabetic Agents from Natural Products:**	**Kapil Dev**; E. Ramakrishna; Rakesh Maurya	Elsevier ISBN: 978-0-128-09692-5	**2016**, Chapter 4, pp 113-145

	Natural Product Drug Discovery'' edited by Prof. Gautam Brahmachari			
2.	***Marine-Derived Anti-Alzheimer's Agents of Promise***" published in Wiley-VCH Book series entitled with **''Neuroprotective Natural Products: Clinical Aspects and Mode of Action''** edited by Prof. Gautam Brahmachari	**Kapil Dev**; Rakesh Maurya	Wiley-VCH ISBN: 978-3-527-34186-3	**2017**, Chapter 7, pp 153-184

14. Research interest: Phytochemistry, Natural Product Chemistry, Medicinal Chemistry

15. Students Guided:

Master students: 13

PhD student enrolled: 02