Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr. Sangita G. Dahotre

Date of Birth: 11/03/1972

Qualifications: M.Sc., Ph.D.

Domain and Department: Basics Science- Physics

Research Area: Nanoferrites, Multiferroics

Organization/Institute: Dr. Babasaheb Ambedkar Technological University, Lonere

Address: Dr. B. A. Tech. University, Lonere, Tal- Mangaon, Dist- Raigad, 402 013

Cell Phone No & Email ID: 7507910717 & sgdahotre@dbatu.ac.in

No of PhD Students Completed & Ongoing: Ph.D. Students completed- 03,
Ph. D. Students ongoing - 01

Publications in Scopus/SCI Journals only (Attach as hyperlink):

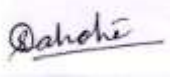
1. **https://doi.org/10.1007/978-981-97-7114-1_5**
2. https://doi.org/10.33472/AFJBS.6.11.2024.1088-1096
3. https://doi.org/10.1134/S1063783424600845
4. https://www.sciencedirect.com/science/article/pii/S2214785323047958)
5. https://doi.org/10.1080/00150193.2023.2262642
6. DOI: https://doi.org/10.1088/1402-4896/ac96d8
7. Vol 6 Number 10, 2021 http://doi.org/10.46335/IJIES.2021.6.10.4
8. http://doi.org/10.46335/IJIES.2021.6.10.4
9. http://dx.doi.org/10.1590/0366-69132021673833111
10. https://doi.org/10.1080/10584587.2020.1859830

Nanomaterials- Research in the domain of nanomaterials focuses on the synthesis, characterization, and application of materials with structures and features at the nanoscale (1-100 nanometers). These materials exhibit unique physical, chemical, and biological properties compared to their bulk counterparts, making them highly valuable in various fields. Nanomaterials include Ferrites, Hexaferrites, multiferroics, nano carbon, spintronics materials

Nanomaterials can be synthesized by following methods-Bottom-up approaches: sol-gel processes, Sol-gel auto combustion, co-precipitation Chemical vapor deposition.

Synthesized nanomaterials can be characterized by-Electron microscopy (TEM, SEM), X-ray diffraction (XRD), Spectroscopy methods (UV-Vis, FTIR, Raman), Atomic force microscopy (AFM), Vibrating Sample Magnetometer (VSM), Dielectric measurements

Applications: Electronics: Nanoscale transistors, flexible electronics, sensors; Energy: Solar cells, batteries, supercapacitors. Environment: Pollution sensors, water purification, Quantum Computing: Spintronics devices



Name & Sign

Dr. S. G. Dahotre

Dr. Babasaheb Ambedkar Technological University Lonere, Raigad

One Page Summary of Research Area

1.	**Full Name:**	Dr. P. B. Lokhande
2.	**Designation and Address :**	Professor and Head Department of Chemistry Dr. Babasaheb Ambedkar Tech. University, Lonere Ph- 8600674584, Email-pblokhande@dbatu.ac.in
3.	**Educational Qualification:**	M.Sc. Ph.D. in Chemistry, M.A. in Politics
4.	**Field of Specialization:**	Industrial Chemistry, Environmental Chemistry
5.	**Area of Research :**	Environmental Pollution, Phytochemistry, Photocatalysis, Nano-materials
6.	**Experience (In years):**	Teaching: 29 Years, Research: 20 Years
7.	**Publications:**	Journal: 30, Conference: 20
9.	**Number of Ph.D. Students:**	Awarded- 04, In progress-01
10.	**Awards**	1. National Award for Distinguished Teacher 2. Best Teacher Award (2018) 3. Acharya Jeevak Distinguished Scientist Award.
11.	**Details of Research Area**	**Environmental Pollution:** Determination of organic, metallic, microbial pollutants in river and ground water and their effects on biotic life. **Phytochemistry**: Extraction of essential oil and phytochemicals and study of their antimicrobial and medicinal properties. **Nano-materials and Photocatalyst:** Synthesis of nano-materials by various methods and study of their applications in photodegradation, hydrogen generation, sensing technology, Skin care technique.

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr. Amit Arjun Bagade

Date of Birth: 18/08/1987

Qualifications: M.Sc., Ph.D

Domain and Department: Science and Humanities

Research Area: Material Science

Organization/Institute: Rajarambapu Institute of Technology, Rajaramnagar

Address: A/P- Padegaon Tal-Phaltan Dist- Satara

Cell Phone No & Email ID: 9960500356, amitbagade@sitcoe.org.in

No of M. Tech & PhD Students Completed & Ongoing: Nil

Publications in Scopus/SCI Journals only (Attach as hyperlink):
https://scholar.google.co.in/citations?user=hKlPH94AAAAJ&hl=en

Summary of Research Domain

1. Introduction

- Briefly define **ferrites** (e.g., ceramic compounds with iron oxide as a main component, known for magnetic properties).
- Mention their general significance (e.g., in electronics, microwave devices, magnetic storage).

2. Classification

- Differentiate between **soft ferrites** (used in transformers, inductors) and **hard ferrites** (used in permanent magnets).
- Common types: **MnZn ferrites, NiZn ferrites, Co ferrites, etc.**

3. Key Properties

- Magnetic permeability, high resistivity, low eddy current loss.
- Temperature stability and frequency-dependent behavior.

4. Applications in the Domain

- Summarize how ferrites are applied in your field.
  - **Example (for electronics):** Ferrites in EMI suppression, transformers, inductors.
  - **Example (for sensors):** Ferrites as gas sensors, pressure sensors, or biosensors.

5. Recent Advancements

- Mention any recent innovations (e.g., nanostructured ferrites, doped ferrites, composite materials).
- Cite notable studies or breakthroughs if applicable.

6. Research Gaps / Challenges

- E.g., optimization of magnetic properties, thermal stability, fabrication methods, scalability, cost-efficiency.

Name & Sign

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

- **Name** : Dr. Yuvraj Gokul Pardeshi
- **Date of Birth** : 14/09/1983
- **Qualifications** : Ph. D. [Mathematics], SET
- **Domain and Department** : Mathematics and Department of Basic Science and Humanities
- **Research Area** : Differential transforms method, Differential equation, Integral Equations, Partial Integro Differential Equations, Numerical Analysis, Integral Transforms, Fluid Mechanics, Linear Algebra and Applied Mathematics etc.
- **Organization/Institute** : Hindi Seva Mandal's, Shri Sant Gadge Baba College of Engineering and Technology, Bhusawal.
- **Address** : Near Z.T.C. Bhusawal-425203, District-Jalgaon, Maharashtra, India.
- **Cell Phone No and Email ID** : 9881867748 and yuvrajgp@gmail.com
- **No of M. Tech & PhD Students Completed and Ongoing:** Nil
- **Publications in Scopus/SCI Journals:**

https://www.scopus.com/authid/detail.uri?authorId=57211802978

- **Summary of Research Domain:**

Research Domain includes comparison between properties of two dimensional Differential transform method and Modified DTM for Linear Partial Integro Differential Equations. It is found that the Modified DTM is independent on boundary conditions whereas two dimensional DTM is depends on both initial and boundary conditions. Also, Differential transform used for Thermoelastic Field Analysis under Moore-Gibson-Thompson Theory. Comparison between Laplace Differential Transform Method, Double Laplace transform and Double Elazki transform using Partial Integro Differential Equations. Linear Mixed Partial Differential Equations using Semi-Analytic Numerical Method.

Present research work is going on comparison between numerical methods using fractional differential equation and also in fluid mechanics.

During research and academic activity, I have published 06 research papers (02 SCOPUS, 02 UGC CARE-I and 02 Peer Reviewed/Refereed Journals), Two Copyright Registered (Registration Number-L-137662/2023, December 11, 2023 and Registration Number-L-148871/2024, June 06, 2024 respectively). One Book Published: Differential Transform Method, First Edition, June 2023, ISBN: 978-93-91708-95-5, Excel Publication (Nitya Publication), Bhopal and participated in 15+ conferences, 20+ Workshops/Faculty Development Programs and 20+ Seminars/Webinars.

Presently working as a Faculty with the rank of Assistant Professor (Approved) at Department of Basic Sciences and Humanities of Hindi Seva Mandal's, Shri Sant Gadge Baba College of Engineering and Technology, Bhusawal affiliated to Dr. Babasaheb Ambedkar Technological University, Lonere, Maharashtra, India.

Ypardeshi

Dr. Yuvraj Gokul Pardeshi

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr. Vijay Shivaji Baviskar

Date of Birth: 03/11/1982

Qualifications: M.Sc. (SET), Ph.D.

Domain and Department: Physics (Material Science),
Applied Sciences & Humanities

Research Area: Energy Conversion & Storage devices

Organization/Institute: R. C. Patel Institute of Technology, Shirpur

Address: Near Nimzari naka, Shirpur, Dist: Dhule, Pin: 425405

Cell Phone No & Email ID: 7588814210, vijay.baviskar@rcpit.ac.in

No of M. Tech & PhD Students Completed & Ongoing: Nil

Publications in Scopus/SCI Journals only (Attach as hyperlink):

Sr. No.	Indexing(Scopus/ Web of Science/Peer-Reviewed)	Name of Journal	Impact factor	Google Link of Paper
1	Scopus	Optik	3.1	Sensitization of TiO2 by chemically deposited Cu2S for solar cell: Effect of deposition time on photoelectrochemical performance - ScienceDirect
2	Web of Science	JOURNAL OF NANO- AND ELECTRONIC PHYSICS	0.716	SumDU Repository: Room Temperature Synthesized TiO2/Bi2Se3 Bilayer Thin Film by Simple Chemical Route: Study the Effect of Deposition Time of Bismuth Selenide on Physical Properties of Film
3	Scopus	Journal of Materials Science: Materials in Electronics	2.8	Effect of deposition time on photoelectrochemical performance of chemically grown Bi2Se3-sensitized TiO2 nanostructure solar cells | Journal of Materials Science: Materials in Electronics
4	Scopus	Optical Materials	3.8	Simple chemical route synthesized TiO2/Ag2S heterostructure towards

				efficient semiconductor sensitized solar cells - ScienceDirect
5	Scopus	Journal of Electroanalytical Chemistry	7.8	Solution processed 2D SnSe nanosheets catalysts: Temperature dependent oxygen reduction reaction performance in alkaline media - ScienceDirect
6	Scopus	Nano-Structures & Nano-Objects	5.9	Simple and low-cost Cu2S/TiO2 architecture for 3G ETA solar cell: Fabrication, characterization and their performance - ScienceDirect
7	Scopus	Next Energy		Enhancing 3G ETA solar cells with novel Bi2Se3 nanoparticles synthesized on TiO2: Impact of immersion cycles on PEC performance - ScienceDirect

Summary of Research Domain:

Synthesis, characterization and systematic study of inexpensive metal oxide and metal chalogenide semiconducting materials. Furthermore demonstrated their potential in photoconversion devices (Solar cell) and energy storage devices.

Name & Sign
Dr. Vijay Shivaji Baviskar

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr. Govind Prabhakar Kamble

Qualifications: M.Sc. (Maths), Ph.D.

Department: Mathematics

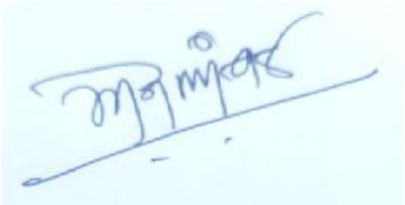
Research Area: Integral Transform, Fractional Calculus

Address: P.E.S. College of Engineering, Chh. Sambhajinagar, 431002

Cell Phone No & Email ID: 9423745007, 8275350304, kamblegp.14@gmail.com

Experience: 30 years

Publications: Total International Journals: 14 (Peer reviewed Journals), 06 SCOPUS INDEXED and 06 UGC Care list.



Dr. Babasaheb Ambedkar Technological University Lonere, Raigad

One Page Summary of Research Area

Name: Dr. KALPESH ANIL ISAI

Qualifications: PHD, SET, M.Sc.(CHEMISTRY)

Department: APPLIED SCIENCES AND HUMANITIES

Research Area: Photocatalysis, Photocatalyst, Nanomaterials and thin films, Industrial wastewater treatment, Novel Semiconducting Materials, Material Characterization and analysis

Address: R. C. PATEL INSTITUTE OF TECHNOLOGY, SHIRPUR, DIST. DHULE (MH)

Cell Phone No & Email ID: 9960654950, kalpesh.isai@rcpit.ac.in

Experience : 15 years

Publications: International Journals: 07 (SCOPUS INDEXED), 09 (Peer reviewed Journals)

International Conferences: 02

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr. Suraj Subhash Nikte

Date of Birth:26/11/1984

Qualifications: Ph. D (Physics)

Domain and Department: Basic Sciences and Humanities (Physics)

Research Area: Atmospheric sciences, Space physics

Organization/Institute: Fabtech Technical Campus, COER, Sangola

Address: Sangola

Cell Phone No & Email ID: suraj.nikte@ftccoe.ac.in (9860914436)

No of M. Tech & PhD Students Completed & Ongoing: Nil

Publications in Scopus/SCI Journals only (Attach as hyperlink):

https://scholar.google.com/citations?user=k4cIWasAAAAJ

Summary of Research Domain

I worked on the study of cosmic radio noise absorption in the ionosphere using riometer. I have studied the diurnal, seasonal and annual variations in the cosmic radio noise absorption (I) as well as the latitudinal and longitudinal variation in the signal strength of cosmic radio noise from southern (3 stations) and northern (7 stations) hemispheres. In addition to that I have studied I during major solar proton events as well as magnetic storms.

- Familiar with various ground based equipments for **atmospheric study** such as riometer (by La Jolla Sciences), All sky imager, Scintillation unit, M. F Radar system.
- Familiar with various ground based equipments for **seismic study** such as Induction coil magnetometer, Proton Precession Magnetometer (PPM), Taurus Seismograph.
- Familiar with various space based observations through various satellites such as Geosynchronous Orbiting Environmental satellite (GOES), Detection of Electro-Magnetic Emissions Transmitted from Earthquake Regions (DEMETER) satellite, Advanced Composition Explorer (ACE) satellite.

Dr. Suraj Subhash Nikte

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr.Panchsheela Ashok Ubale

Date of Birth: 20/07/1983

Qualifications: Ph.D.

Domain and Department: Chemistry (Organic) , General Science and Engineering

Research Area: Bioinorganic chemistry, Material Science, Organic chemistry

Organization/Institute: Nagesh Karajagi Orchid College of Engineering and Technology, Solapur.

Address:

Cell Phone No & Email ID: 9370350152, panchsheela_ubale@rediffmail.com

No of M. Tech & PhD Students Completed & Ongoing:Nil

Publications in Scopus/SCI Journals only (Attach as hyperlink):
https://scholar.google.com/citations?user=mLe7l_YAAAAJ&hl=en&oi=ao

Summary of Research Domain:

During my Ph.D. work, I have synthesized Quinazoline Schiff bases and their metal complexes which are emerging as promising compounds with a wide range of biological activities, including antibacterial, antifungal, and anticancer properties. These molecules are synthesized by condensing quinazoline with various aldehydes or ketones derivatives. The complexation of quinazoline Schiff bases with transition metal ions like copper,nickel, manganese, zinc etc. enhanced their biological efficacy and provided new therapeutic avenues. I have **18 papers on this work and I have published 5 patents. Out of these 1 is granted.**

My extended work is on Material Science like

Objective:

- Formulation of magnetic bionanocomposites with SF
- Studies on physico-chemical, magnetic and biological properties of magnetic SF bionanocomposites

- Synthesis and characterization of metal complex based anticancer drugs
- Loading and unloading of anticancer drugs with SF magnetic bionanocomposites

Expected output and outcome of the proposal:

The outcomes of studies on magnetic bionanocomposites with Silk Fibroin (SF) for applications in anticancer drug delivery could encompass a range of findings and advancements. Here are some potential outcomes:

- The magnetic properties of the bionanocomposites may facilitate improved targeting of cancer cells. The study might reveal increased accumulation of the magnetic nanocomposites at the tumor site under the influence of an external magnetic field, leading to enhanced drug delivery precision.

Loknete Shamrao Peje
Government College of Engineering Ratnagiri-415612

Name: Dr. Uttam Sakhahari Kakade
Designation:Associate Professor (CAS) Physics,
Email_id:uskcoeratna@gmail.com, uttam.kakade@gcoer.ac.in
Mob:9011286723

Educational Qualification:

Sr. No.	Qualification	College/Institute	University	Year of Passing	Percentage
1	Ph.D. Physics	IIT Roorkee	IIT Roorkee	2016	
2	M.Phil. Physics	Dept. of Physics, Univ. of Pune	Pune University	1999	A Grade
3	M.Sc. Physics	Dept. of Physics, Univ. of Pune	Pune University	1990	61%
4	B.Sc. Physics	Sarda College Ahmednagar	Pune University	1988	67%

Working Experience(Starting with current to old)

Sr. No.	Experience Type	Institute / Company Name	Graduate / Post GraduateLevel	Designation	From	To
1.	Teaching	Government College of Engineering Karad/Chandrapur/Avsari/ **Ratnagiri**	UG	Assistant Professor	Nov 2003 Onwards	Till Date
2.	Teaching	Amrutvahini College of Engineering, Sangamner	UG	Assistant Professor	Aug 1994	Oct 2003

Research Area: High Energy Physics/ Nuclear physics / Digital Signal Processing

Research Publications:

Sr. No.	Title of Paper	Name of Conference/ Journals in which/where published	Year of Publicat io
1.	Effects of Guided Recitation of Pradhnyavivardhan Stotra on Memory, Mentaand Scholastic Abilities among Growing Children Nitin S More, U.S. Kakade, Pushkraj D Sonwane, Prajakta T Deshmukh* and Rajan N Pangul	International Journal of Medical Research & Health Sciences (2021) Volume 10, Issue 8	**2021**

2.	Quarkonium dissociation at finite temperature and chemical potential Uttam kakade and Binoy Krishna Patra	**Physical Review C 92, 025401 (2015)** DOI: 10.1103/PhysRevC.92.024901	**2015**
3.	Complex Potential and Bottomonium suppressionLHC energy Uttam kakade, Binoy Krishna Patra and Lata Thakur	Int. J. Mod. Phys. A30, 155043 (2015) DOI: 10.1142/S0217751X15500438	**2015**
4.	Imaginary Part of the Medium Modified Heavy Quark Potential Lata Thakur, Uttam kakade and Binoy Krishna Patra	*Proc Indian Natn Sci Acad* **81** No. 1 February 2015 Special Issue, pp. 75-85 DOI: 10.16943/ptinsa/2015/v81i1/48054	**2015**
5.	Dissociation of Quarkonium in a Complex Potential Lata Thakur, UttamKakade, Binoy Krishna Patra (IIT, Roorkee)	Phys.Rev. D 92 054022 (2014) arXiv:1401.0172 [hep-ph]	2014
6.	Bottomonium suppression: A probe to the pre-equilibrium era of quark matter UttamKakade, Binoy Krishna Patra, Lata Thakur (IIT, Roorkee)..	arXiv:1404.6152 [hep-ph]	2014
7.	Dissociation of quarkonium in an anisotropic hot QCD medium Lata Thakur (IIT, Roorkee), NajmulHaque (Saha Inst.), UttamKakade (IIT, Roorkee),	Phys.Rev. D88 (2013) 5, 054022 DOI: 10.1103/PhysRevD.88.054022 arXiv:1212.2803 [hep-ph]	2013

	Binoy Krishna Patra (IIT, Roorkee).		
8.	Bottomonium suppression: A probe to the pre-equilibrium era of Hydrodynamics U.S. Kakade, Binoy Krishna Patra, and A.K. Chaudhuri	Proceedings of the DAE Symp. On Nucl. Phys. 58 (2013) 798, BARC Mumbai	2013
9.	Strongly interacting QGP and quarkonium suppression at RHIC and LHC energies VineetAgotiya, Lata Devi, UttamKakade, Binoy Krishna Patra (IIT, Roorkee).	Int.J.Mod.Phys. A27 (2012) 1250009 DOI: 10.1142/S0217751X12500091	2012
10.	χ_c and χ_b States in Hot Quark-Gluon Plasma by Binoy Krishna Patra, Lata Devi, Uttam Kakade, Vineet Agotiya, Vinod Chandra	Journal of Modern Physics. 06/2012; 336065:483-491 http://dx.doi.org/10.4236/jmp.2012.36065	2012
11.	Gluonic dissociation of J/ψ's in a viscous strongly-coupled quark-gluon plasma Uttam Kakade, B. K. Patra, (Physics	Proceedings of the DAE-BRNS symposium on nuclear physics. V. 57, Delhi University	2012

Workshop/ Seminars/ Training :

Sr. No.	Workshop title	Name of College/Institute	Duration and Dates
1.	Face-to-Face FDP on Universal Human VAlues-II	PVG's College of Engineering and Technology and G.K. Pate Wani Institute oManagement, Pune	16-20 Jan 2024
2.	Advances in Deep Learning and it's Engineering Applications	Government College of Engineering and Research Avasari (Khurd)	01-01-2024 to 06-01-2024
3.	MATLAB APPLICATIONS IN ENGINEERING AND SCIENCE	GOVERNMENT COLLEGE OF ENGINEERING KARAD & RAJKIYA ENGINEERING COLLEGE AZAMGARH	27/04/ 2020 to 01/05/ 2020
4.	Optimization TEchniques With Engineering Applications through ICT	NITTTR Chandigarh	10/12/2018 to 14/12/1018
	Mems and Names	QIP Center IIT Roorkee	1 Week June 2014
	Nuclear Matter at extreme conditions	Variable Energy Cyclotron Centre, Kolkata	Three weeks January 2013

	DAE-BRNS **International**symposium on nuclear physics.	Bhabha Atomic Research Center Mumbai	1 Week, December 2013
	Nuclear Matter at extreme conditions	Variable Energy Cyclotron Centre, Kolkata	Three weeks January 2013
5.	International Meeting on compressed baryonic Matter(CBM)	Variable Energy Cyclotron Centre, Kolkata	1 Week September2012
6.	Nuclear Matter at extreme conditions	Variable Energy Cyclotron Centre, Kolkata	Three weeks January 2013
7.	DAE-BRNS National symposium on nuclear physics.	Department of Physics Department of Physics, Delhi University	1 Week, December2012
8.	Induction training program phase I	TTTIR Bhopal	2 weeks, May 2010
9.	Applications of Matlab in Engineering	Govt. College of Engineering Chandrapur	1 Week April 2009
10.	Refresher course in Physics	Dept. Physics Univ. Of Pune	3 weeks January 2008
11.	Refresher course in Physics	Dept. Physics Univ. Of Pune	3 weeks November 2006
12.	Solid state lasers Lasers and its applications	IIT Kanpur	1 Week January 2006

Dr. Babasaheb Ambedkar Technological University Lonere Raigad

One Page Summary of Research Area

Name: Dr. V. L. Chinchane

Date of Birth: 21/05/1985

Qualifications: Ph. D. in Mathematics

Domain and Department: Mathematics

Research Area: Fractional Calculus and Inequalities

Organization/Institute: Deogiri Institute of Engineering and Management Studies

Address: Deogiri Campus, Chh. Sambhajinagar

Cell Phone No&Email ID:7972625099/ chinchane85@gmail.com

No of M. Tech & PhD Students Completed & Ongoing:Nil

Publications in Scopus/SCI Journals only(Attach as hyperlink):

https://scholar.google.com/citations?user=RzshD0kAAAAJ&hl=en&oi=ao
https://www.webofscience.com/wos/author/record/K-8697-2016
https://www.scopus.com/authid/detail.uri?authorId=55930986100
https://www.linkedin.com/in/dr-vaijanath-chinchane-54242220/
https://www.researchgate.net/profile/Vaijanath-Chinchane
https://orcid.org/0000-0003-4246-8405

Summary of Research Domain

It is well known truth that the inequalities have always been of great importance for the development of many branch of mathematics and other fields of sciences. The basic work ”Inequalities” by Hardy, Littlewood and Polya appeared in 1934, the book ”An Introduction To Inequalities” by Beckenbach and Bellman in 1961, and ”Analytic Inequalities” by Mitrinovic published in 1970 made considerable contribution to this field and supplied motivations, ideas, techniques and applications. Among the many type of inequalities those associated with the name, Chebyshev, Minkoswshi, Gruss, Young, Medved, Hadamard, Jenssen, Pachpatte, Hilbert, Hardy, Ostrowski, Opial and Hilbert-pachpatte have deep roots and made a great impact on various fields of mathematics. During the last five decades, many mathematicians have worked in the field fractional calculus. The concept fractional calculus is the generalization of traditional calculusinto non-integer differential and integral order. In fact, seventeenth century, when in1695 the derivative of order one half was de- scribed by Leibnitz, since then, manypopular mathematician have studied on this and related questions, that from fields which is known as fractional calculus. There are several books on theories and development of fractional calculus. The many authors have introduces the several types of fractional derivatives and integral such as Riemann-Liouville, Caputo, Ricez, Hadamard and Grunwald-Letnikov. It has been noticed that the most of the works on the topic is based on Riemann- Liouville, Caputo-type fractional derivatives and integral. An- other kind of fractional derivatives and integral that appeared side by side to Riemann-Liouville, Caputo-type in the literature is the fractional derivative Some

authors have studied basic properties fractional q-integral operators and q-derivative. In literature some mathematician has worked on Siago fractional integral operator. In 2009, G. A. Anastaussiou has written a monograph ”Fractional Differentiation Inequalities” which is the first try in files of fractional differ- ential and integral inequalities. In the monograph author studies the Opial, Poincare, Sobolve, Ostroskski, Hilbert and Hilbert-Pachpatte fractional integral inequalities using three different type of fractional derivatives; Canavati, Riemann-Liouville, Caputo. During the last few years, many researcher have worked on fractional differential and integral inequalities using various type of fractional integral such as Riemann- Liouville and Caputo, Hadamard, Saigo, Caputo-Frabrizo, q-fractional integral operators. Recently many authors have studied on fractional integral inequalities using different fractional integral operators. The works on fractional integral inequalities are limited to till date.

Name & Sign

Dr. V. L. Chinchane