# YOGESH J. BAGUL | Curriculum Vitae

## General Information


**Name** : Yogesh J. Bagul

**Designation** : Assistant Professor

**Gender** : Male

**Category** : O.B.C.

**Permanent Address** : A/P – Lohoner, Tal - Deola, Dist - Nashik ( M.S. ), PIN – 423301

**Address for Correspondence** : K. K. M. College, Manwath, Tal – Manwath, Dist – Parbhani ( M.S. ), PIN – 431505

**Contact No.** : 09764420916

**Email ID** : yjbagul@gmail.com

**Nationality** : Indian


**Subject:** Mathematics **Specialization:** Inequalities, Approximation Theory , Number Theory.

## Educational Qualification

- **Sant Gadge Baba Amravati University** — **Amravati**
  Ph.D. — November 2023
- **Savitribai Phule Pune University** — **Pune**
  SET — September 2017
- **CSIR & HRD** — **New Delhi**
  NET with CSIR JRF, All India Rank : 63/365 — August 2012
- **University of Pune** — **Pune**
  M.Sc. ( Pure Mathematics ) — June 2011
  Percentage : 63.35
  GPA : 4.2/06
- **University of Pune** — **Pune**
  B.Sc. ( Mathematics ) — June 2008
  Percentage : 76.58
- **Maharashtra State Board** — **Nashik Division**
  H.S.C. — February 2000
  Percentage : 64.83
- **Maharashtra State Board** — **Nashik Division**
  S.S.C. — March 1998
  Percentage : 83.73

## Teaching Experience

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|---|---|
| **K. K. M. College, Manwath** | **Manwath(Parbhani)** |
| Assistant Professor (Permanent, Granted) | Feb. 2013 – Present |
| **AISSMS Institute of Information Technology** | **Pune** |
| Assistant Professor ( Contractual Basis ) | August 2012 – Feb. 2013 |
| **AISSMS College of Pharmacy** | **Pune** |
| Assistant Professor ( Clock hour Basis ) | August 2012 – Feb. 2013 |
| **Dr. Babasaheb Ambedkar Technological University(BATU)** | **Lonere ( Raigad )** |
| Assistant Professor ( Contractual Basis ) | August 2011 – May 2012 |
| **Private Coaching Classes** | **Lohoner/Satana (Nashik)** |
| Taught Maths/Physics to 1st std. to 12th std. students | June 2001 – May 2008 |

## Journal articles

| Sr. No. | Author/s | Title of Article | Journal name | Year | Volume no. | Issue no. | Page nos. | Article URL | Indexed in UGC- CARE Group-I Yes/No | Indexed in UGC- CARE Group - II Yes/No |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. | **Y. J. Bagul**, R. M. Dhaigude, S. B. Thool | New inequalities for quotients of circular and hyperbolic functions | Journal of Mathematical Inequalities | 2022 | 16 | 04 | 1243-1258, | http://files.ele-math.com/articles/jmi-16-83.pdf | | Yes Scopus and WOS, JCR IF: **2.9** |
| 2 | **Y. J. Bagul**, R. M. Dhaigude | Alternative proofs of Shafer's inequality for inverse hyperbolic tangent | Journal of Mathematical Inequalities | 2022 | 16 | 03 | 909-913 | http://dx.doi.org/10.7153/jmi-2022-16-61 | | Yes Scopus and WOS, JCR IF: **2.9** |
| 3 | **Y. J. Bagul**, C, Chesneau, M. Kostic | On the Cusa-Huygens inequality | Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemátics | 2021 | 115 | 01 | 1-12 | https://doi.org/10.1007/s13398-020-00978-1 | | Yes Scopus and WOS, JCR IF: **2.169** |
| 4 | S. B. Thool, **Y. J. Bagul**, R. M. Dhaigude, C. Chesneau | Bounds for quotients of inverse trigonometric and inverse hyperbolic functions | Axioms | 2022 | 11 | 06 | 262 | https://doi.org/10.3390/axioms11060262 | | Yes Scopus and WOS, JCR IF: **1.824** |

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|---|---|---|---|---|---|---|---|---|---|---|
| 5 | **Y. J. Bagul**, B. Banjac, C. Chesneau, M. Kostic, B. Malesevic | New refinements of Cusa-Huygens inequality | Results in Mathematics | 2021 | 76 | 02 | 1-16 | https://doi.org/10.1007/s00025-021-01392-8 | | Yes Scopus and WOS, JCR IF: **1.5** |
| 6 | **Y. J. Bagul**, C. Chesneau | Some sharp circular and hyperbolic bounds of exp(-x^2) with applications | Applicable Analysis and Discrete Mathematics | 2020 | 14 | 01 | 239-254 | https://www.jstor.org/stable/26964956 | | Yes Scopus and WOS, JCR IF: **1.5** |
| 7 | **Y. J. Bagul** | Remark on the paper of Zheng Jie Sun and Ling Zhu | Journal of Mathematical Inequalities | 2019 | 13 | 03 | 801-803 | http://dx.doi.org/10.7153/jmi-2019-13-55 | | Yes Scopus and WOS, JCR IF: **1.168** |
| 8 | **Y. J. Bagul**, C. Chesneau, M. Kostic, T. Lutovac, B. Malesevic, M. Rasajski | Convexity and double-sided Taylor's approximations | Hacettepe Journal of Mathematics and Statistics | 2023 | 52 | 03 | 560-571 | https://doi.org/10.15672/hujms.1096357 | | Yes Scopus and WOS, JCR IF: **0.8** |
| 9 | **Y. J. Bagul** | On a result of Bhayo and Sandor | Analysis Mathematica | 2021 | 47 | 01 | 33-36 | https://doi.org/10.1007/s10476-020-0060-8 | | Yes Scopus and WOS, JCR IF: **0.788** |
| 10 | **Y. J. Bagul** | Inequalities involving circular, hyperbolic and exponential functions | Journal of Mathematical Inequalities | 2017 | 11 | 03 | 695-699 | http://dx.doi.org/10.7153/jmi-2017-11-55 | | Yes Scopus and WOS, JCR IF: **0.777** |

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|---|---|---|---|---|---|---|---|---|---|---|
| 11 | A. R. Chouikha, C. Chesneau, **Y. J. Bagul** | Some refinements of well-known inequalities involving trigonometric functions | Journal of the Ramanujan Mathematical Society | 2021 | 36 | 03 | 193-202 | http://www.mathjournals.org/jrms/2021-036-003/2021-036-003-002.html | | Yes Scopus and WOS, JCR IF: **0.244** |
| 12 | C. Chesneau, **Y. J. Bagul** | A new bounding technique based on infinite product decomposition | The Journal of Analysis | 2022 | 30 | 04 | 1625-1633 | https://doi.org/10.1007/s41478-022-00421-1 | | Yes Scopus and WOS |
| 13 | **Y. J. Bagul**, R. M. Dhaigude, C. Chesneau, M. Kostic | Tight exponential bounds for hyperbolic tangent | Jordan Journal of Mathematics and Statistics | 2022 | 15 | 04 | 807-821 | https://journals.yu.edu.jo/jjms/Issues/Vol15No42022PDF/2.html | | Yes Scopus and WOS |
| 14 | **Y. J. Bagul**, C. Chesneau | Generalized bounds for sine and cosine functions | Asian-European Journal of Mathematics | 2022 | 15 | 01 | 2250012 | https://doi.org/10.1142/S1793557122500127 | | Yes Scopus and WOS |
| 15 | R. M. Dhaigude, **Y. J. Bagul** | A note on the Becker-Stark type inequalities | Problemy Analiza (Issues of Analysis) | 2022 | 11 | 01 | 58-66 | https://doi.org/10.15393/j3.art.2022.10770 | | Yes Scopus and WOS |
| 16 | **Y. J. Bagul,** S. B. Thool, C. Chesneau, R. M. Dhaigude | Refinements of some classical inequalities involving sinc and hyperbolic sinc functions | Annales Mathematicae Silesianae | 2022 | 37 | 01 | 1-15 | https://journals.us.edu.pl/index.php/AMSIL/article/view/14911 | | Yes Scopus and WOS |

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|---|---|---|---|---|---|---|---|---|---|---|
| 17 | **Y. J. Bagul**, R. M. Dhaigude, M. Kostic, C. Chesneau | Polynomial-Exponential Bounds for Some Trigonometric and Hyperbolic Functions | Axioms | 2021 | 10 | 04 | 308 | https://doi.org/10.3390/axioms10040308 | | Yes Scopus and WOS |
| 18 | **Y. J. Bagul** | On the Shafer-type inequality for the inverse tangent function | Applied Mathematics E-Notes | 2021 | 2021 | -- | 421-425 | https://www.math.nthu.edu.tw/~amen/2021/AMEN-200606.pdf | | Yes Scopus and WOS |
| 19 | **Y. J. Bagul**, R. M. Dhaigude, B. A. Bhayo, V. M. Raut | Wilker and Huygens type inequalities for mixed trigonometric-hyperbolic functions | Tbilisi Mathematical Journal | 2021 | 14 | 02 | 207-220 | https://doi.org/10.32513/tmj/19322008134 | | Yes Scopus and WOS |
| 20 | **Y. J. Bagul**, M. Kostic, C. Chesneau, R. M. Dhaigude, | On the generalized Becker-Stark type inequalities | Acta Universitatis Sapientiae, Mathematica | 2021 | 13 | 01 | 88-104 | https://sciendo.com/article/10.2478/ausm-2021-0005 | | Yes Scopus and WOS |
| 21 | R. M. Dhaigude, **Y. J. Bagul**, V. M. Raut | Generalized bounds for hyperbolic sine and hyperbolic cosine functions | Tbilisi Mathematical Journal | 2021 | 14 | 01 | 41-47 | https://doi.org/10.32513/tmj/1932200813 | | Yes Scopus and WOS |

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|---|---|---|---|---|---|---|---|---|---|---|
| 22 | **Y. J. Bagul**, C. Chesneau | Refined forms of Oppenheim and Cusa-Huygens type inequalities | Acta et Commentationes Universitatis Tartuensis de Mathematica | 2020 | 24 | 02 | 183-194 | https://doi.org/10.12697/ACUTM.2020.24.12 | | Yes Scopus and WOS |
| 23 | C. Chesneau, **Y. J. Bagul**, | A note on some new bounds for trigonometric functions using infinite products | Malaysian Journal of Mathematical Sciences | 2020 | 14 | 02 | 273-283 | https://mjms.upm.edu.my/lihatmakalah.php?kod=2020/May/14/2/273-283 | | Yes Scopus and WOS |
| 24 | **Y. J. Bagul**, S. K. Panchal | Certain inequalities of Kober and Lazarevic type | Journal of the Indian Mathematical Society | 2022 | 89 | 1-2 | 1-7 | https://doi.org/10.18311/jims/2022/20737 | | Yes Scopus |
| 25 | C. Chesneau, **Y. J. Bagul**, R. M. Dhaigude | On simple polynomial bounds for the exponential function | Asia Pacific Journal of Mathematics | 2022 | 09 | -- | 1-7 | https://doi.org/10.28924/APJM/9-6 | | Yes Scopus |
| 26 | **Y. J. Bagul**, R. M. Dhaigude | Simple efficient bounds for arcsine and arctangent functions | South East Asian Journal of Mathematics and Mathematical Sciences | 2021 | 17 | 03 | 45-62 | https://rsmams.org/journals/articleinfo.php?articleid=621&tag=seajmams | | Yes Scopus |

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|---|---|---|---|---|---|---|---|---|---|---|
| 27 | **Y. J. Bagul**, C. Chesneau | Sigmoid functions for the smooth approximation to the absolute value function | Moroccan Journal of Pure and Applied Analysis | 2021 | 07 | 12 | 12-19 | https://doi.org/10.2478/mjpaa-2021-0002 | | Yes Scopus |
| 28 | **Y. J. Bagul,** B. K. Khairnar | A note on smooth transcendental approximation to \|x\| | Palestine Journal of Mathematics | 2021 | 10 | 02 | 644-646 | https://pjm.ppu.edu/paper/891-note-smooth-transcendental-approximation-x | | Yes Scopus |
| 29 | C. Chesneau, **Y. J. Bagul** | On a reverse trigonometric Masjed-Jamei inequality | Asia Pacific Journal of Mathematics | 2021 | 08 | 13 | 1-5 | https://doi.org/10.28924/APJM/8-13 | | Yes Scopus |
| 30 | **Y. J. Bagul**, C. Chesneau, M. Kostic | The Cusa-Huygens inequality revisited | Novi Sad Journal of Mathematics | 2020 | 50 | 02 | 149-159 | https://doi.org/10.30755/NSJOM.10667 | | Yes Scopus |
| 31 | M. Kostic**, Y. J. Bagul**, C. Chesneau, | Generalized inequalities for ratio functions of trigonometric and hyperbolic functions | Indian Journal of Mathematics | 2020 | 62 | 02 | 183-190 | https://www.amsallahabad.org/pdf/ijm622.pdf | | Yes Scopus |
| 32 | C. Chesneau, **Y. J. Bagul** | Some new bounds for ratio functions of trigonometric and hyperbolic functions | Indian Journal of Mathematics | 2019 | 61 | 02 | 153-160 | https://www.amsallahabad.org/pdf/ijm612.pdf | | Yes Scopus |

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|---|---|---|---|---|---|---|---|---|---|---|
| 33 | **Y. J. Bagul**, C. Chesneau | Some new simple inequalities involving exponential, trigonometric and hyperbolic functions | CUBO, A Mathematical Journal | 2019 | 21 | 01 | 21-35 | http://dx.doi.org/10.4067/S0719-06462019000100021 | | Yes Scopus |
| 34 | B. Ravi, V. Laxmi, **Y. J. Bagul** | A solution to an open problem on reverse trigonometric Masjed-Jamei inequality | Journal of the Chungcheong Mathematical Society | 2022 | 35 | 01 | 33-37 | https://doi.org/10.14403/jcms.2022.35.1.33 | Yes | |
| 35 | R. M. Dhaigude, S. B. Thool, **Y. J. Bagul**, V. M. Raut | On simple bounds for inverse hyperbolic sine and inverse hyperbolic tangent functions | Jnanabha | 2021 | 15 | 01 | 101-108 | https://doi.org/10.58250/Jnanabha.2021.51114 | Yes | |
| 36 | **Y. J. Bagul,** S. B. Thool, R. M. Dhaigude | On New Inequalities Involving Circular, Inverse Circular, Inverse Hyperbolic and Exponential Functions | Ganita | 2020 | 70 | 02 | 67-72 | https://bharataganitaparisad.com/wp-content/uploads/2020/11/702-ch6.pdf | Yes | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 37 | C. Chesneau, **Y. J. Bagul** | New sharp bounds for the logarithmic function | Electronic Journal of Mathematical Analysis and Applications | 2020 | 08 | 01 | 140-145 | https://doi.org/10.21608/ejmaa.2020.312813 | Yes | |
| 38 | R. M. Dhaigude, C. Chesneau, **Y. J. Bagul** | About trigonometric-polynomial bounds of sinc function | Mathematical Sciences and Applications E-Notes | 2020 | 08 | 01 | 100-104 | https://doi.org/10.36753/mathenot.585735 | Yes (At the time of subhmission and acceptance) | |
| 39 | **Y. J. Bagul** | On exponential bounds of hyperbolic cosine | Bulletin of the international Mathematical Virtual Institute | 2018 | 08 | 02 | 365-367 | http://www.imvibl.org/buletin/bulletin_imvi_8_2_2018/bulletin_imvi_8_2_2018_365_367.pdf | | |
| 40 | **Y. J. Bagul, S. B. Garud** | Puzzle type examples of linear congruence | Journal of computer and mathematical sciences | 2018 | 09 | 09 | 1952-1956 | http://nutanmahavidyalaya.com/images/3.3.4_Research_paper/RP_61_SBG.pdf | | |
| 41 | **Y. J. Bagul** | New inequalities involving circular, inverse circular, hyperbolic, inverse hyperbolic and exponential functions | Advances in Inequalities and Applications | 2018 | 08 | -- | 8 | https://doi.org/10.28919/aia/3556 | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 42 | **Y. J. Bagul**, C. Chesneau | Two double sided inequalities involving sinc and hyperbolic sinc function | International Journal of Open Problems in Computer Science and Mathematics | 2019 | 12 | 04 | 15-20 | http://www.ijopcm.org/Vol/2019/4.2.pdf | | |
| 43 | **Y. J. Bagul**, R. M. Dhaigude | Generalized optimal algebraic bounds for the exponential function | Asia Mathematika | 2023 | 07 | 02 | 17-20 | http://www.asiamath.org/article/vol7iss2/AM-2304-7108.pdf | | |
| 44 | **Y. J. Bagul**, C. Chesneau, R. M. Dhaigude | On algebraic bounds for exponential function with applications | Mathematical Analysis and its Contemporary Applications | 2023 | 05 | 01 | 85-93 | https://doi.org/10.30495/maca.2023.1987625.1068 | | |
| 45 | **Y. J. Bagul** | A short remark on the result of József Sándor | Caspian Journal of Mathematical Sciences | 2020 | 09 | 02 | 179-181 | https://doi.org/10.22080/cjms.2020.18233.1463 | | |
| 46 | **Y. J. Bagul**, C. Chesneau | New sharp bounds for tangent function | Bulletin of the Allahabad Mathematical Society | 2019 | 34 | 02 | 277-282 | https://www.amsallahabad.org/pdf/bams342.pdf | | |
| 47 | **Y. J. Bagul** | On simple Jordan type inequalities | Turkish Journal of Inequalities | 2019 | 03 | 01 | 1-6 | http://tjinequality.com/articles/03-01-001.pdf | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 48 | C. Chesneau, **Y. J. Bagul** | New refinements of two well-known inequalities | Eurasian Bulletin of Mathematics | 2019 | 02 | 01 | 4-8 | http://www.ebmmath.com/index.php/EBM/article/view/34 | | |
| 49 | **Y. J. Bagul** | A smooth transcendental approximation to mod(x) | International Journal of Mathematical Sciences and Engineering Applications | 2017 | 11 | 02 | 213-217 | http://www.ascent-journals.com/IJMSEA/Vol11No2/20-bagul.pdf | | |

## Book Chapter

| Sr. No. | Author/s | Title of Book Chapter | Title of Book | Year | Editors of Book | Page no. | Name of Publisher | ISBN | Book Chapter URL |
|---|---|---|---|---|---|---|---|---|---|
| 1 | **Y. J. Bagul** | An Approximation of Gaussian Integral Over (-1, 1) | Advances and Challenges in Science and Technology | 2023 | Prof. Khalil Kassmi | 181-186 | B P International | 978-81-967198-1-4 | https://doi.org/10.9734/bpi/acst/v8/6844C |

## Conference Proceedings

| Sr. No. | Author/s | Title of Article | Title of Conference Proceedings | Month & Date | Year | Editors of Proceedings | Page no. | Place of Conference | Name of Publisher | ISBN | Article URL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Y. J. Bagul**, R. M. Dhaigude | Generalizations of fundamental inequality with applications | International Conference on Computational Applied Sciences and its Applications | June, 23 | 2023 | Ali A. Al-Jarrah | 2768 | Jaipur (Rajasthan) | AIP Conference Proceedings | 1551-7616 (ISSN) | https://doi.org/10.1063/5.0151798 |

## Conference Presentations

| Sr. No. | Author/s | Title of Presentation | Title of Conference | Month & Date | Year | Place of Conference | Name of Organiser |
|---|---|---|---|---|---|---|---|
| 1. | **Y. J. Bagul**, R. M. Dhaigude | Generalizations of fundamental inequality with applications | International Conference on Computational Applied Sciences and its Applications | April, 28-29 | 2022 | Jaipur (Rajasthan), India | Department of Applied Sciences, University of Engineering and Management, Jaipur, Rajasthan |

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|---|---|---|---|---|---|---|---|
| 2. | **Y. J. Bagul**, R. M. Dhaigude | Sharp trigonometric-polynomial bounds of sinc function | Recent Trends in Mathematical Sciences | October, 29-30 | 2021 | Ghatanji, Dist: Yavatmal (M. S.), India | Department of Mathematics, S. P. M. Science and Gilani Arts, Commerce College, Ghatanji and Department of Mathematics, Phulsing Naik Mahavidyalaya, Pusad. |
| 3. | V. B. Patare, **Y. J. Bagul** | An alternative proof of a result of Bhayo and Sandor | National Conference on Recent Advancement in Pure and Applied Mathematics | January, 20 | 2024 | Beed (M. S.), India | Balbhim Arts, Science and Commerce College, Beed (M. S.), India |

## Reviewer/Referee

I have been a referee of national and international journals of repute and reviewed more than 25 research papers. Moreover, I am a post publication reviewer at Mathematical Reviews of American Mathematical Society.

## Conferences/Workshops Attended

**Conferences**.....

**21st Dec. 2023:** National Conference on Envisioning Mathematics Education in Line with NEP 2020 organized by Mahatma Gandhi Mahavidyalaya Ahmedpur

**27-30 Nov.2014** : International Conference on History & Development of Mathematics organized by Savitribai Phule Pune University, Pune & Indian Society for History of Mathematics

**21-24 April 2013** : National Conference on Discrete Mathematics, Algebra & Analysis organized by Department of Mathematics, University of Pune, Pune

**Webinars**.....

**14th June 2020:** One Day Webonar on "How to Create Course and Course Activities in Open Source Online Learning" organized by Hindu College, Guntur

**04th June 2020:** "Applications of Differential Equations" organized by Kongunadu Arts and Science College, Coimbatore

**Seminars**.....

**21 – 22 April 2017 :** National Seminar on Issues of Farmers Suicides in India : Past, Present and Future organized by Department of Economics, K. K. M. College, Manwath, Dist : Parbhani ( M. S. )

**Workshops**.....

**08th October 2021:** Documenting SSR: An Exercise in Institute's Image Building, organized by K. K. M. College, Manwath, Dist: Parbhani (M. S.)

**04th August 2017 :** One day workshop on B. Sc. Second Year Syllabus Structure ( C. B. C. S. ) in Mathematics/Computer Science organized by Bahirji Smarak Mahavidyalaya, Basmatnagar, Dist : Hingoli (M.S.)

**28th Jan.2014** : National Workshop on MATLAB software & its Applications organized by School of Mathematical Sciences, S.R.T.M.U. Nanded in Collaboration with Mathworks Banglore & ADCC infocad, Nagpur

**26th August 2013** : National Workshop on Group Theory organized by School of Mathematical Sciences, S.R.T.M.U. Nanded & marathwada Mathematical Society

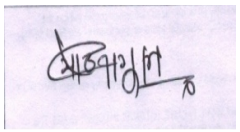
**20th Dec.2012** : Workshop on Engineering Mathematics-II organized by MIT, Pune & Board of Studies, University of Pune, Pune

**31st July 2012** : Workshop on Engineering Mathematics-I & Examination Reforms organized by PICT, Pune & Board of Studies, University of Pune, Pune

## Declaration

I hereby declare that the above information furnished by me is correct to the best of my knowledge & belief.

**Date :**



**Place : Manwath**

**( Dr. Yogesh J. Bagul )**