

CURRICULUM VITAE (A. Sankaranarayanan)

Sl. No	Subject/Topic	Nos.
01.	Research papers published in Web of Science Journals	62
02.	Research papers published in Scopus indexed Journals	58
03.	Research papers published in PubMed Journals	0
04.	Research papers published in CARE list of Journals	1
05.	Google Scholar Citations	659 in all ; 187 since 2015
	H-index	13 in all ; 6 since 2015
	i 10-index	19 in all ; 2 since 2015
06.	Books authored	nil
07.	Books edited (Proc. Intl Colloquium tifr 2012)	1.

NAME : Professor. Dr. A. Sankaranarayanan

DATE AND PLACE OF BIRTH : March 24, 1961; Harikesavanallur,
Tirunelveli (District), India

NATIONALITY : Indian

SEX AND MARITAL STATUS : Male, married

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ACADEMIC QUALIFICATIONS : B.Sc. (Mathematics), The M.D.T.Hindu College,
Tirunelveli, 1979-82, affiliated to Madurai-Kamaraj
University. Degree awarded on October 22, 1982.
M.Sc. (Mathematics), The M.D.T. Hindu College,
Tirunelveli, 1982-84, affiliated to Madurai-Kamaraj
University. Degree awarded on October 19, 1984.
Ph.D (Mathematics), T.I.F.R., University of Bombay,
1985-1989. Degree awarded on January 18, 1991.

TITLE OF THE Ph.D. THESIS : Some problems in Analytic Number Theory.

POSITIONS HELD : 1) From 16.08.1985 to 31.01.1989
Research Scholar, TIFR, Mumbai
2) From 01.02.1989 to 31.01.1993 Research
Associate, TIFR, Mumbai.
3) From 01.02.1993 to 31.07.1998 Fellow,
TIFR, Mumbai.
4) From 01.08.1998 to 31.07.2001 Fellow (E),
TIFR, Mumbai.
5) From 01.08.2001 to 31.07.2005 Reader (F),
TIFR, Mumbai.
6) From 01.08.2005 to 31.12.2011
Associate Professor (G), TIFR, Mumbai.
7) From 01.01.2012 to 14.07.2020 (FN)
Professor (H), TIFR, Mumbai.
8) From 14.07.2020 (AN) being
Professor, School of Math & Stat, UOH.

FIELD OF INTEREST : Basically Number Theory
Analytic Number Theory
Elementary Number Theory

CURRENT INTERESTS : Riemann Zeta-Function
Theory, Sieve methods,
Elementary Number Theory,
Algebraic Number Theory.

AWARDS AND DISTINCTIONS : Fellow of
The National Academy of Sciences,
India (Allahabad)
(elected in the year 2004).

Courses Delivered :

1. One semester course in "Real Analysis" for zeroeth year students of Phd program at TIFR during the Academic Year 2006-2007.
2. One semester course in "Complex Analysis" for first year students of Phd program at TIFR during the Academic Year 2010-2011.
3. "A Series of lectures in Analytic Number Theory" (15 hrs) were delivered at the Department of Mathematics, Yonsei University during the period from January 21, 2013 to January 25, 2013.
4. One semester course in "Complex Analysis" for first year students of Phd program at TIFR during the Academic Year 2013-2014.
5. One semester course in "Complex Analysis" for first year students of Phd program at TIFR during the Academic Year 2017-2018.
6. Real Analysis-I (MM401) and Real Analysis-II (MM451) courses were delivered (online) for post-graduate students at the University of Hyderabad during August 08, 2020 to June 30, 2021.
7. Introduction to Number Theory (MM506/MA406) was delivered (online) for post-graduate students at the University of Hyderabad during August 16, 2021 to December 24, 2021.
8. Advanced Number Theory (MM583/MA495, Elective course) was delivered for post-graduate students at the University of Hyderabad during January 22, 2022 to June 14, 2022.

Significant positions held :

1. A member of the Interview Panel in the selection of Research Scholars (for the Ph.D program in school of Mathematics, TIFR) during the years 2007, 2012 and 2016.
2. Chairman of the Interview Panel in the selection of Research Scholars (for the Ph.D program in school of Mathematics, TIFR) during the year 2014.
3. An active member of the Organizing Committee of the "International Conference on " Diophantine Equations" held at the Tata Institute of Fundamental Research, Mumbai, India from 16.12.2005 to 20.12.2005.
4. An active member of the Organizing Committee of the "International conference on Analytic Number Theory", held at TIFR, Mumbai, India, from 05.10.2009 to 09.10.2009.
5. An active member of the Organizing Committee of the prestigious event "International Colloquium on Automorphic Representations and L -functions" held at TIFR during January 03, 2012 to January 11, 2012 and one of the editors of this Proceedings published by TIFR (Hindustan Book Agency).
6. An active member of the Organizing Committee of the "Discussion Meeting on Analytic Number Theory 2015", held at TIFR, Mumbai, India, from 05.01.2015 to 09.01.2015.
7. I was a nominated member by the Board of Governors of IIT (BHU), Varanasi in the Faculty Recruitment Panel in 2017 to recruit Professors and Associate Professors for the Department of Mathematical Sciences, IIT (BHU) during 11.07.2017 to 13.07.2017.
8. I was nominated as a member of the Faculty Recruitment Panel for the Department of Mathematics, IISER, Berhampur, Orissa, India during April 06-07, 2018.
9. I was nominated as a national expert in the Promotion Committee to scrutinize a case for a possible promotion in the Department of Mathematics, IMSC, Chennai, India during May 15-16, 2018.
10. I was nominated as a national expert in the Probation Evaluation Committee to scrutinize three cases for a possible confirmation in the Department of Mathematics, IISER, Thiruvananthapuram, India during July 05-08, 2018.

11. I was nominated as a member of the Selection Committee in recruiting Assistant Professors and Associate Professors for the Faculty of Mathematics, IITGN, Gandhi Nagar, India during January 31-February 02, 2019.
12. An active member of the Organizing Committee of the "International Conference on Number Theory 2019 (ICNT 2019)", held at IISER Thiruvananthapuram, India, from 11.03.2019 to 13.03.2019.
14. Assigned as an external examiner for the Ph.D viva-voce (04.02.2005) of P.R. Mishra (BHU (Varanasi)), visited BHU, Varanasi from 03.02.2005 to 06.02.2005 on invitation.
15. Assigned as an external examiner for the Ph.D thesis of Kishore Bhat (NIAS, Bengaluru) by the University of Mysore in 2008.
16. Assigned as an external examiner for the Ph.D thesis of Hans-Peter Reck (Department of Mathematics, University of Ulm, Germany) in 2014.
17. Assigned as an external examiner for the Ph.D viva-voce (20.06.2019) of Ritika Sharma (HRI, Prayagraj (Allahabad)), visited HRI, Allahabad from 19.06.2019 to 22.06.2019 on invitation.
18. Assigned as an external examiner for the Ph.D viva-voce (12.09.2019) of Pranendu Darbar (IMSc, Chennai), visited IMSc, Chennai from 08.09.2019 to 15.09.2019 on invitation.
19. Assigned as an external examiner for the Ph.D viva-voce (03.10.2019) of Suraj Singh Khurana (IIT Ropar), visited IIT, Ropar from 02.10.2019 to 04.10.2019 on invitation.
20. Nominated as a member of the screening / scrutinizing committee for the recruitment of Professors, Associate Professors and Assistant Professors to the Department of Statistics and Applied Mathematics by the Vice-Chancellor of the Central University of Tamil Nadu (CUTN), Thiruvarur during July 28-31, 2019.
21. Nominated as a member of the experts committee for the recruitment of Associate Professors and Assistant Professors to the Department of Mathematics by the Vice-Chancellor of the Central University of Tamil Nadu (CUTN), Thiruvarur during December 28-30, 2019.
22. Nominated as a member of the experts committee for the recruitment of Assistant Professors to the School of Mathematics at the Institute of Mathe-

mathematical Sciences (IMSc), Chennai by the Director, IMSc, Chennai and the Video Conference Meeting was held on September 27, 2020 (Sunday) between 12:00 Noon and 1:00 p.m.

23. Acted as a referee in the recruitment of Assistant Professor in the Department of Mathematical Sciences and Statistics, Indian Statistical Institute, Kolkatta during March 2021.

24. I was nominated as a member of the Selection Committee in recruiting Assistant Professors, Associate Professors and Professors for the Faculty of Mathematics, IITGN, Gandhi Nagar, India during May 28-29, 2021 and it was done through video conference.

25. Assigned as an external examiner for the Ph.D Thesis of Lalit Vaishya (HRI, Prayagraj (Allahabad)) in May 2021.

26. Invited for the 10th convocation ceremony (August 29, 2021) of IITGN (Gandhi Nagar, Ahmedabad) and also invited for the maiden convocation ceremony (October 28, 2021) of IISER (Berhampur).

27. Invited to be the Chief Guest on the "National Mathematics Day" (22.12.2021) and inaugurated (online) the "Mathematics Research Forum" at the "National Institute of Technology", Thiruchirapalli.

28. Invited to be the Chief Guest on the "National Mathematics Day" (22.12.2021) and delivered a scientific talk (online) at the "Navi Mumbai Science Foundation (NMSF)" (co-organized by Karmaveer Baurao Patil College, Vashi).

29. Appointed as a member of the screening/selection panel in recruiting Guest Faculty, School of Mathematics and Statistics, University of Hyderabad during January 25-28, 2022.

30. Appointed as a member of the screening/selection panel in recruiting Faculty members (backlog advertisement dated 25-10-2021), School of Mathematics and Statistics, University of Hyderabad during March 10, 2022.

Service extended to VSRP Programs :

1. Three lectures were delivered for VSRP students (2006) at TIFR on "Introduction to Prime Number Theorem".

2. I had a VSRP student Mr. Ved Dattar (of CMI, Chennai) in the summer of May 2007. I trained him to learn the complex analytic proof of the Prime

number Theorem and also taught him the proof of the "Goldbach-Schnirelmann Theorem", namely *There exists a positive integer c such that every integer greater than 1 is the sum of at most c prime numbers.*

I also trained a college student Mr. Vinay Agrwal (of St.Xavier's College, Mumbai) to learn the elementary proof of the Prime Number Theorem (due to Atle Selberg) under a summer student research Fellowship Program of The National Academy of Sciences, India (Allahabad).

3. I trained Mr. Deep Ray (a student from Hindu College, Delhi) in Complex Analysis during his VSRP Program in 2009 at TIFR.

4. I trained Mr. Zuhir Mohammed (a student from IISER, Pune) in Number Theory during his VSRP Program in 2010 at TIFR.

5. I trained Kumari. Moumanti Podder (a student from ISI, Kolkatta) in Number Theory during her VSRP Program in 2011 at TIFR on Selberg's elementary proof of prime number theorem and Selberg's Sieve.

6. I guided a VSRP Mr. Sai Teja allotted to me by the Academy of Sciences (IAS) in 2013 on Brun's Sieve.

7. I guided two VSRP students allotted to me by the Academies in 2014.

(i). Ms. Dipanjana Dalui (IISER, Kolkatta) learnt the error term $E(x)$ of the divisor problem with the proof that $E(x) \ll x^{1/3+\epsilon}$ using Vinogradov's method of estimating sums of fractional parts.

(ii) Mr. Karan Khaturia (UM-DAE CBS, Mumbai) learnt Minkowski theorem on Geometry of Numbers and the existence of non-trivial integral points satisfying various useful inequalities.

8. I guided a VSRP student allotted to me by the Academies in 2016.

(i). Ms. Harshita Rathore (IIT, Chennai) learnt the "Elementary Proof of the Prime Number Theorem" of A. Selberg with certain specific error term. She also learnt Minkowski theorem on Geometry of Numbers and the existence of non-trivial integral points satisfying various useful inequalities.

9. I guided a VSRP student allotted to me by TIFR VSRP Co-ordinators in 2017.

(i). Ms. Madhuparna Das (Institute of Mathematics & Applications (IMA), Bhubaneswar) learnt the "Vinogradov's inequality on the absolute value of certain exponential sum" which produces a non-trivial bound in certain general case. The proof uses a kind of tight bound on certain multi-dimensional inte-

gral for the absolute value of certain exponential sum due to Vinogradov. It shed some lights on the growth estimate of the Riemann zeta-function on the critical line.

10. I guided a VSRP student allotted to me by TIFR VSRP Co-ordinators in 2018.

(i). Mr. Vishal Neeraje (Indian Statistical Institute (ISI), Bengaluru) learnt the "Prime Number Theorem for Arithmetic Progression" which produces an asymptotic formula for the number of primes upto x of the form $p \equiv l(\text{mod}k)$ (with $(l, k) = 1$ according as whether Siegel zero exists or not) with a precise non-trivial error term. The proof uses complex analytic tools like Perron's formula, zero-free region for Dirichlet L -functions and so on.

Service extended to Ph.D Program :

1. I guided "Mr. Saurabh Kumar Singh" and supervised the thesis work of him for his Ph.D degree. He completed with a good Ph.D thesis within the stipulated time and the viva-voce was held in September 2015.

2. Currently, there are three students (Ms. Amrinder Kaur (19MMPP03), Mr. Anubhav Sharma (19MMPP02), Mr. Venkatasubbareddy (20MMPP02)) from University of Hyderabad pursuing their Ph.D under my guidance.

Positions held in Committees of University of Hyderabad :

1. Member of the Admission Committee for School of Mathematics & Statistics, UOH.
2. Member of the Purchase and Infrastructure Committee for School of Mathematics & Statistics, UOH.
3. Member of the Library Committee for School of Mathematics & Statistics, UOH.
4. Member of the Selection Committee (promotion under CAS for Prof. Manjunath from School of Mathematics & Statistics, UOH).
5. Member of the school Board of the School of Mathematics & Statistics, UOH by default.
6. Member of the Academic Council of UOH by default.
7. Dean-in-Charge for School of Mathematics & Statistics, UOH on several occasions in the absence of the Dean Professor Radha during the period (July 14, 2020 -)
8. School level Grievance Committee Chairman (School of Math & Stat, UOH) w.e.f 26.08.2021.
9. Invited for the 10th convocation ceremony (August 29, 2021) of IITGN (Gandhi Nagar, Ahmedabad) and also invited for the maiden convocation ceremony (October 28, 2021) of IISER (Berhampur).
10. During April 01, 2021 - March 31, 2022, I was chosen as the referee for five Research articles (one each) for the following five internationally reputed journals.
 - (a). Journal of Number Theory (Elsevier)
 - (b). Mathematische Zeitschrift (Springer)
 - (c). Integers (Electronic Journal, Colgate University)
 - (d). Functiones et Approximatio Commentarii Mathematici (Poland)
 - (e). Indian Journal of Pure and Applied Mathematics (India)
11. During April 01, 2022 - March 31, 2023, I was chosen as the referee for xxxx Research articles for the following xxxx internationally reputed journals.
 - (a). Bulletin des sciences mathematiques (France).
 - (b). Functiones et Approximatio Commentarii Mathematici (Poland)
 - (c). Indian Journal of Pure and Applied Mathematics (India) (two articles)