



Dr. B. K. N. MUTHUGOBAL, M.Sc., Ph.D.,
Assistant Professor

Personal Details :

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Website : <https://sites.google.com/view/bknmuthugobal?pli=1>

Academic Qualifications:

Degree	Subject	Year	University
Ph.D.	Mathematics	2014	Bharathidasan University, Tiruchirappalli (Full Time) (UGC Regulation 2009)
M.Sc.	Mathematics	2010	Government Arts College, Kumbakonam.
B.Sc.	Mathematics	2008	SKSS Arts College, Thiruppanandal.

Teaching Experience: 10 years

Name of the post	Institution	Period	
		From	To
Assistant Professor in Mathematics	Tamilavel Umamaheswaranar karanthai arts college, Karanthai, Thanjavur-613002	11.02.2021	Till date

Guest Lecturer in Mathematics	Bharathidasan university constituent arts and science college, nannilam-610 105	10.09.2014	09.02.2021
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Research Experience: 2010 to till date

Additional Responsibilities

- ❖ Served as UG **External Examiner** in the practical examination in Department of Mathematics, Government Arts And Science College for Women, Orathanadu on 23-10-2024.
- ❖ Served as UG **External Examiner** in the practical examination in Department of Mathematics, Government Arts College (Autonomous), Kumbakonam on 15-10-2024.
- ❖ **Placement Officer** , Tamilavel Umamaheswaranar Karanthai Arts college, Karanthai,Thanjavur From 14.06.2023 to 30.09.2024.
- ❖ Served as **E-Governance Data Nodal officer**, Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai, Thanjavur.613002. from 13.08.2024 to till date
- ❖ **Co-ordinated and supervised** the students to complete “**Survey Regarding Online Gaming**” as per the instructions of the Director of Collegiate Education and Commissioner of Technical Education on February 2024.
- ❖ **Co-ordinated whole final year (2023 – 2024)** batch **students** to complete the **Hiremee link** Assessment exam in online mode. This exam was mandatory for the campus interview which came immediately after this online exam.
- ❖ Served as UG **External Examiner** in the practical examination in Department of Mathematics, Government Arts College (Autonomous), Kumbakonam on 03-11-2023.
- ❖ **Served as Member - Board of Studies** for the **PG Syllabus** in Department of Mathematics on 21.07.2023, Government Arts College (Autonomous), Kumbakonam.

- ❖ **Co-ordinated B.Sc., Chemistry final year students** to participate in the **IBM skills Build** Employability Program of *Tamil Nadu Skill Development Corporation and Naan Mudhalvan*, a mandatory course on job readiness is attended by students after finishing the course, students attended online exam on 05-04-2023.
- ❖ **Organized and coordinated** final year (2023 – 2024) batch students to actively participate in the “*Tech Saksham career catalyst: A 3-Day Employability Workshop*” implemented through **Edunet foundation** as a part of the **Naan Mudhalvan Placements**.
- ❖ **IBM COURSE co-ordinator** Under Naan Mudhalvan scheme for 2022-2023 batch students of Tamilavel Umamaheswaranar Karanthai Arts college, Karanthai, Thanjavur.
- ❖ **Paper valuation chief of mathematics** at Bharathidasan University , Trichirapalli on 2021 and 2022.
- ❖ **Academic council member** Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai, Thanjavur.613002
- ❖ **Sports committee member** Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai, Thanjavur.613002
- ❖ **IQAC Joint Co-Ordinator** , Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai, Thanjavur.613002.
- ❖ **Parents Teacher Association secretary:** 01.06.2017 to 14.12.2020. Bharathidasan university constituent arts and science college, nannilam-610 105.
- ❖ **IQAC convenor** : 2019-2020 . Bharathidasan university constituent arts and science college, nannilam-610 105
- ❖ **Controller of Auditor General (CAG)** : January 2020. Bharathidasan university constituent arts and science college, nannilam-610 105
- ❖ **Principal Incharge.** Bharathidasan university constituent arts and science college, nannilam-610 105.

Areas of Research

Linear Algebra , Graph theory, Topology, Matrix theory.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Project	PG	10	0
	UG / Others	0	0

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters
37	0	14	03	01

Total Citations (Google Scholar) : 11
h-index : 02
i10 index : 00

Google Scholar : <https://scholar.google.co.in/citations?user=DXDShvgAAAAJ&hl=en>

Patents

Title: Generation of Never Born protein sequences using Toeplitz Matrices.

Inventors: B.K.N.MUTHUGOBAL, G.Ramesh, S.Parthasarathy, S.Suvaithenamudhan and K.Muthuvel Prasath.

Patent Number: Indian Application No. 201941004408

Filing Date: 06.02.2019, **Current status:** filed

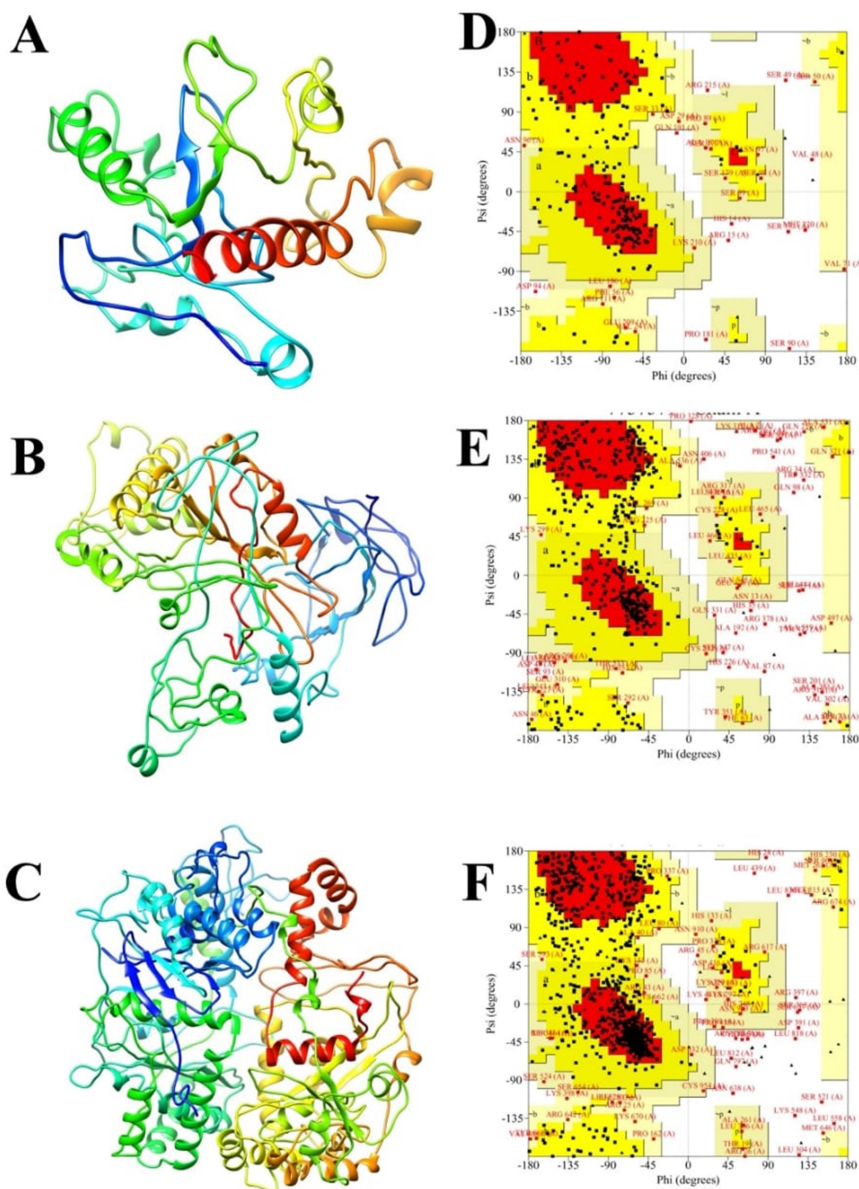
Complete After Provisional (CAP) application has been filed on 04 august 2020

Research topic description:

In general, the proteins have particular structures and its further applications are made out of within its permissible combinations to advance medical research to find solution for some of the diseases that are degenerating cells affecting living beings. This Never Born Protein identified as to make use of unutilized proteins in the body which lives in the body in an ideal state with no structure and interaction with any other protein structure. These protein structures are theoretically possible, which had not been selected by evolution. Such theoretical proteins are called 'Never Born Proteins (NBPs)', Generating **Never Born Protein Sequences (using mathematical representation in possible Gray code and partitioned Gray**

code) using the representations of the universal Genetic code for n=2-bit and 3-bit binary numbers. We analyze the Hamming Distance matrices of all these Gray code and partitioned Gray code possibilities for which we obtain the Toeplitz and partitioned Toeplitz matrices, respectively. We use this Gray code and partitioned Gray code representations of the universal Genetic combined with the **novel Toeplitz matrix** approach to generate many Never Born Protein (NBP) sequences, which exhibit intrinsic structural stability.

We have developed the “**Gen NBPseq**” **online web server** to generate the NBP sequences using the above approach for a given input data and the server is made available at <http://bioinfo.bdu.ac.in/nbps>. In general, Never Born protein sequences may have a lot of potential applications in synthetic biology. <https://ipindiaservices.gov.in/publicsearch>



Events organized in leading roles

- **Organised one day workshop** on how to crack your first interview for the tamilavel umamaheswaranar karanthai arts and science college students.lecture was given by S.S.Kousika , member of the association of intellectual manager, ISSM business school on 04.09.2024
- **As the placement officer**, Made the Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai students to participate in Naan Mudhalvan Statewide mega job fair program held at sastra University, Thanjavur. On 20 – 02 – 2024. Four of my students had been selected for the permanent job.
- **Organised** free coaching classes for the tnpSC competitive exam at tamilavel umamaheswaranar karanthai arts and science college from 08.01.2024 to 01.03.2024.
- **As the placement officer**, Made the Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai students to participate in Naan Mudhalvan Statewide mega job fair program held at Kundhavai Nachiyar Government womens arts college, Thanjavur. On 20 – 02 - 2024
- As a **placement officer, organised** the campus interview held at tamilavel umamaheswaranar karanthai arts and science college on 26.10.2023.News 7 tamil news channel had selected 10 students for the second round interview.out of them 4 were selected for permanent placement.
- **Organised** one day journalist training workshop at tamilavel umamaheswaranar karanthai arts and science college, Thanjavur on 20.10.2023
- **As the placement officer**, Made the Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai students to participate in Dr.Kalaingar centenary special job fair held at Raja Serfoji Government arts and science college, Thanjavur. On 12 – 08 – 2023
- **As the placement officer**, Made the Tamilavel Umamaheswaranar Karanthai Arts College, Karanthai students to participate in Naan Mudhalvan Statewide mega job fair program held at Kundhavai Nachiyar Government womens arts college, Thanjavur. On 14 - 06 – 2023
- **Organized** One-Day Training Program on Research Orientation in Mathematics – cum - Institutional Visit for first year M.Sc. students (No. of students participated: 39) held at University Informatics Centre, Bharathidasan University, Palkalaiperur, Tiruchirappalli-24, on 2019.

- **Organized** One-Day Training Program on Research Orientation in Mathematics – cum - Institutional Visit for first year M.Sc. students (No. of students participated: 39) held at University Informatics Centre, Bharathidasan University, Palkalaiperur, Tiruchirappalli-24, on 2018.
- Conducted **A Debate program as convenor** on “Pengalukkana sattangal” at Bharathidasan University Constituent Arts and Science College, Nannilam on 05-10-2016.
- Conducted **A Debate program as convenor** on indraiya samuthaayathil manitha urimai mathikapadugiratha marukapadugiratha at Bharathidasan University Constituent Arts and Science College, Nannilam on 01-10-2015.
- Conducted National level seminar as **convener on Mathematical art** in Bharathidasan University Constituent Arts and Science College, Nannilam on 24th January 2015.

List of Seminars/ Conferences/ Symposia/ Workshops attended

- **Participated** in the international conference on "Artificial intelligence in nanomaterials engineering , environmental & health care applications-2024 (IC- ANEHA' 24) through through online mode held at Asia Pacific University Kuala Lumpur Malaysia during 27th to 29th February 2024 at Bharat institute of higher education and research, selaiyur, chennai. And presented paper entitled “**OPTIMISING PERISTABLE PHARMACEUTICAL INVENTORY CONTROL IN SUPPLY CHAIN: A HOLISTIC APPROACH USING OPERATION RESEARCH TECHNIQUE**”.
- **Participated** in the UGC – Sponsored **online refresher course in Digital Education** (Multi-Disciplinary) from 08-12-2023 to 21-12-2023 organized by HRDC-Bharathidasan University, and obtained ‘A’ Grade.
- Participated in the UGC- Sponsored online faculty Induction Programme conducted by the UGC- Human resource development centre, Madurai Kamaraj University held from 01.11.2022 to 30.11.2022 .
- Attended one day workshop on “Naunces on Documentation Process: Research Proposal, NAAC & NIRF” on 12.08.2022 by Tamilnadu State council for higher education in Mathematical science at Thanthai Periyar Government arts and science college, Trichy.

- Participated in two- day Training program conducted by Tamilnadu State council for higher education in Mathematical science at Government Arts and science college, Jayankondam on 05-05-2022 and 06-05-2022.
- Participated in the International Conference on Recent Advancements in pure and applied mathematics held at and organized by Ramanujan research centre, PG & Research Department of Mathematics, Government Arts College (Autonomous), Kumbakonam on 25th February, 2019.
- Participated in Special lecture program conducted a seminar on **Never born protein sequence using Toeplitz matrix** at Bharathidasan university constituent college for women, orthanadu on 30th September 2018.
- Participated in the **state level seminar** on recent trends in mathematics and its applications held at and organized by Department of Mathematics, Thiru.Vi.Ka.Government Arts College,Tiruvarur on 7th march, 2018.
- Participated in the **National level seminar (RMS 2010)** held at and organized by Ramanujan research centre, PG & Research Department of Mathematics, Government Arts College (Autonomous), Kumbakonam on 22thDecember, 2012.
- Participated in the **National level seminar on the occasion of birthday celebration of Srinivasa Ramanujan 2008** held at and organized by Ramanujan research centre, PG & Research Department of Mathematics, Government Arts college (Autonomous), Kumbakonam on 22th December , 2008.
- Paper presented in National Level Seminar. Krishnamoorthy, S., Gunasekaran, K., **Muthugobal, B.K.N.** and Jothivasan. S., “On s-k-unitary Matrices”, Proceedings of the **National Seminar on Recent Advancements in Mathematics 2009 (RAM-2009)**, Ramanujan Research Centre, Dept. of Mathematics, Govt. Arts College (Autonomous), Kumbakonam, Tamilnadu, 277-285, December 21st & 22nd 2009, ISBN: 81-88338-09.

Resource Person in various capacities

Number of Invited / Special Lectures delivered: 01

List of Invited Lectures

2016		
S. No	Date	Place
1	30.09.2016	Bharathidasan University Constituent college for Women, Orathanadu-614 625.

Recent Publications

- Jay Shree Mathivanan, Victor Violet Dhayabaran, Mary Rajathe David, **Muthugobal Bagayalakshmi Karuna Nidhi**, Karuppasamy Muthuvel Prasath and Suvaayarasan Suvaithenamudhan., " Application of deep learning neural networks in computer aided Drug discovery: A review"" Current Bioinformatics, Bentham Science Publishers, UAE, on January 2024, volume 19, issue 9, 2024.pg.no.851-858 (Impact factor: 2.4) <https://www.eurekaselect.com/article/137713> , [10.2174/0115748936276510231123121404](https://doi.org/10.2174/0115748936276510231123121404)
- BKN Muthugobal, G Ramesh, S Parthasarathy, S Suvaithenamudhan, K Muthuvel Prasath (2022), "GenNBPSeq: Online Web Server to Generate Never Born Protein Sequences Using Toeplitz Matrix Approach with Structure Analysis" Current Bioinformatics, Bentham Science Publishers, UAE, 17(7) ,565-577 (Impact Factor: 2,4) <http://dx.doi.org/10.2174/1574893617666220519110154> <https://www.eurekaselect.com/article/123760>
- GenNBPSeq: Generation of Never Born Protein Sequences ,Online Web Server to Generate Never Born Protein Sequences Using Toeplitz Matrix <http://bioinfo.bdu.ac.in/nbps/> hosted on web.
- **BKN Muthugobal**, G Ramesh, S Parthasarathy, S Suvaithenamudhan, K Muthuvel Prasath (2020), Gray Code Representation of the Universal Genetic Code : Generation of Never Born Protein Sequences using Toeplitz Matrix Approach, BioSystems, Elsevier. 198, 104280, 1-12. <https://doi.org/10.1016/j.biosystems.2020.104280> (Impact Factor: 1.957)

- Priyadharshini, M and **Muthugobal, B.K.N.**, "On star Dagger Bi-Matrix and Bi-star Bi- Dagger Bi-Matrix", International journal of science and research(IJSR), Vol.8, Issue 3, March-2019, pp.1279- 1288, **(Impact factor: 7.426)**.
- Hemalatha, M. and **Muthugobal, B.K.N.**, "On s-k Bi-EP Bi-Matrices", International journal for research in Engineering application and management, vol.4, Issue 11, February 2019, ISSN: 2454-9150. **Impact factor: 5.834**
<chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/http://ijream.org/papers/IJREAMV04I1147069.pdf>
- Silanchiya, R and **Muthugobal, B.K.N.**, "on S-k-Bi-Normal Bi-matrices", International Journal for Research in Engineering Application & Management (IJREAM), Vol.04 Issue 11, Feb. 2019, PP.401-407 ISSN:2454-9150 **(Impact factor:5.834)**
<extension://efaidnbmnnnibpcajpcglclefindmkaj/http://ijream.org/papers/IJREAMV04I1147068.pdf>
- Dhivya, V and **Muthugobal, B.K.N.**, "On Bi-Orthogonal Bi-matrices", International Journal for Research in Engineering Application & Management (IJREAM), Vol.4 Issue 11, Feb. 2019, pp.390-400 ISSN:2454-9150 **(Impact factor:5.834)**
<extension://efaidnbmnnnibpcajpcglclefindmkaj/http://ijream.org/papers/IJREAMV04I1147067.pdf>
- **Muthugobal, B.K.N.**, and Raja, R., "Products of conjugate secondary normal matrices", Asian journal of science and technology, Vol. 1, Issue 4 April 2018, pp.7947-7957, ISSN. 0976-3376 **(Impact factor: 6.946)**.
<https://www.journalajst.com/products-conjugate-secondary-normal-matrices>
- **Muthugobal, B.K.N.**, "Weighted Generalized Inverse of Partitioned Matrices in Pseudo Banachiewicz - schur form", Indian journal of applied research, vol.5, Issue: 7, July 2015, ISSN:2249-555x. (Impact factor: 3.62) [https://www.worldwidejournals.com/indian-journal-of-applied-research\(IJAR\)/article/weighted-generalized-inverse-of-partitioned-matrices-in-pseudo-banachiewicz-andndash-schur-form/Njk5Ng==/?is=1&b1=385&k=97](https://www.worldwidejournals.com/indian-journal-of-applied-research(IJAR)/article/weighted-generalized-inverse-of-partitioned-matrices-in-pseudo-banachiewicz-andndash-schur-form/Njk5Ng==/?is=1&b1=385&k=97)
- Ramesh, G., **Muthugobal, B.K.N.**, "The Pseudo Inverse of a Partitioned matrix", Journal of Chemical, Biological and Physical Sciences, Volume 5, No.2, 2015, pp. 1844-18955 **(Impact factor :1.082)**
<https://jcbssc.org/api/public/getFileOld/c/319>
- **Bagyalakshmi. Karuna. Nithi. Muthugobal**, "On Pseudo SCHUR Complements in an EP Matrix", International journal of scientific and Innovative Mathematical Research(IJSIMR), Vol. 3, Issue 2, February 2015, pp. 79-89. **(Impact factor :4.433)** <https://www.arcjournals.org/pdfs/ijsimr/v3-i2/11.pdf>

- Ramesh, G., Jothivasan, S., and **Muthugobal, B.K.N.**, Surendar, R., "On Orthogonal Bimatrices" International Journal of Applied Research 2015; 1(11): pp.1013-1024. (**Impact factor: 5.2**)

- **Muthugobal, B.K.N.** and Surendar, R., "Reverse order law for con-s-k-EP Matrices" ,International journal of Multi disciplinary Research and Modern Education (IJMRME), Volume 1, Issue 1, 2015, pp.344 -351. (**Impact factor : 2.2**) [extension://efaidnbmnnnibpcajpcglclefindmkaj/http://rdmodernresearch.org/wp-content/uploads/2015/10/53.pdf](http://efaidnbmnnnibpcajpcglclefindmkaj/http://rdmodernresearch.org/wp-content/uploads/2015/10/53.pdf)

- Ramesh, G. and **Muthugobal, B.K.N.**, "Partial Orderings on Con-s-k-EP Matrices", Indian journal of Research, PARIPEX Vol. 3, Issue : 8 , August 2014, ISSN:2250-1991. (**Impact factor : 3.4163**) [chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.worldwidejournals.com/paripex/recent issues pdf/2014/August/August 2014 1408699761 70.pdf](http://efaidnbmnnnibpcajpcglclefindmkaj/https://www.worldwidejournals.com/paripex/recent issues pdf/2014/August/August 2014 1408699761 70.pdf)

- **Muthugobal ,B.K.N.** and R.Subash., "Group inverses of con-s-k-EP matrices",International Journal of Scientific and Innovative Mathematical Research (IJSIMR),Vol. 2, Issue 12, December 2014, pp. 940-943 ISSN 2347 - 307X (Print) & ISSN 2347-3142(Online). (**Impact factor : 4.433**) [chromextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.arcjournals.org/pdfs/ijsimr/v2-i12/4.pdf](http://efaidnbmnnnibpcajpcglclefindmkaj/https://www.arcjournals.org/pdfs/ijsimr/v2-i12/4.pdf)

- **Muthugobal , B.K.N.** and R.Raja., "On The Conjugate Secondary Eigenvalues and Secondary SingularValues of A Complex Square Matrix", International journal of mathematics and computer research, vol.2, Issue:12, December 2014, pp. 797-805,ISSN :2320-7167. (**Impact factor : 2.2003**) <https://ijmcr.in/index.php/ijmcr/article/view/188/187>

- **Ramesh, G. and Muthugobal, B.K.N.**, "Con-s-k-Invariant Partial Orderings on Matrices", IOSR JM. Volume 10, Issue 4 Ver. V (Jul-Aug. 2014), PP 41-44,e-ISSN: 2278-5728,p-ISSN: 2319-765X. (Impact factor 1.759) [chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.iosrjournals.org/iosr-jm/papers/Vol10-issue4/Version-5/G010454144.pdf](http://efaidnbmnnnibpcajpcglclefindmkaj/https://www.iosrjournals.org/iosr-jm/papers/Vol10-issue4/Version-5/G010454144.pdf)

- **Muthugobal , B.K.N.** and Raja.R., "The Condition of The Conjugate Secondary Eigen values of Conjugate Secondary Normal Matrices", International journal of modern sciences and engineering technology , IJMSET, Volume 1, Issue 8, 2014, pp.17-21,ISSN 2349-3755. (**Impact factor: 3.094**) [chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ripublication.com/gjpam21/gjpamv17n1_04.pdf](http://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ripublication.com/gjpam21/gjpamv17n1_04.pdf)

- **Muthugobal, B.K.N.**and Subash, R., "Characterizations of k-Normal Matrices", International Journal of Mathematics Trends and Technology, Vol. 4, Issue, 11, December, 2013. (**Impact factor : 1.469**) <https://ijmttjournal.org/Volume-4/issue-11/IJMTT-V4I11P4.pdf>

- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “On Sums of Conjugate Secondary Range Hermitian Matrices”, J. Math. Comput. Sci. 3 (2013), No. 2, pp. 619-630, ISSN: 1927-5307. (**Impact factor : 1.227**)
<https://scik.org/index.php/jmcs/article/view/846>
- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “Reverse order Laws for the Con-s-k-EP Weighted Generalized Inverses”, Research Journal of Mathematical and Statistical Sciences, Vol.1 (6), July-2013, pp.1-7. ISSN: 2320 – 6047. http://www.isca.in/MATH_SCI/Archive/v1/i8/1.ISCA-RJMSS-2013-020.php
- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “Factorization of con-s-k-EP Matrices”, International Journal of Advances in Science Technology (IJAST), Vol. 6, Issue, 03, March, 2013. (**Impact factor 1.016**)
- Ramesh, G. and **Muthugobal, B.K.N.**, “On s-k-Idempotent Matrices”, Journal of Global Research in Mathematical Archives, Volume 1, No. 2, February, 2013, pp.71-75, **ISSN: 2320-5822**
<https://jgrma.info/index.php/jgrma/article/view/9> .
- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “Weighted Drazin Inverse of Con-s-k-EP Matrices”, Elixir International Journal of Applied Mathematics, 58 (2013), pp.14754-14758. (**Impact factor 0.61**)
https://www.elixirpublishers.com/articles/1680351152_201305028.pdf
- Ramesh, G. and **Muthugobal, B.K.N.**, “Con-s-k-EP Generalized Inverses”, Global Journal of Science Frontier Research (F) U.S.A, Volume XIII, Issue XI, Version I, (2013), pp. 125-129. (**Impact factor : 2.2**)
chromeextension://efaidnbmninnibpcapjcgclcfndmkaj/https://globaljournals.org/GJSFR_Volume13/10-Con-s-k-EP-Generalized-Inverses.pdf
- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “Con-s-k-EP Matrices and Its Weighted Generalized Inverse”, International Journal of Modern Engineering Research (IJMER), Vol.2, Issue.5, Sep-Oct.2012 ,pp-3850-3856. (**Impact factor : 3.0**)
https://www.researchgate.net/publication/273745863_Schur_Complement_of_con-s-k-EP_Matrices
- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “Schur Complements Pivotal Transformation on con-s-k-EP Matrices”, International Journal of Current Research, Vol. 4, Issue 03, pp.132-136, March, 2012. (**Impact factor: 5.349**)
<https://journalcra.com/article/schur-complements-pivotal-transformation-con-s-k-ep-matrices>
- **Bagyalakshmi. Karuna. Nithi. Muthugobal**, “Schur Complement of Con-s-k-EP Matrices”, Advances in Linear Algebra & Matrix Theory vol.2, Issue 1, March 2012, pp.1-11. (**Impact factor: 0.43**)
<https://www.scirp.org/journal/paperinformation.aspx?paperid=18343>

- Krishnamoorthy, S., Gunasekaran, K. and **Muthugobal, B.K.N.**, “On Sums of Conjugate Secondary Range k -Hermitian Matrices”, Thai Journal of Mathematics, Vol. 10 NO. 1 (2012), pp. 195–202.

<http://thaijmath.in.cmu.ac.th/index.php/thaijmath/article/view/268>

(Scopus SCImago Journal Rank (SJR) 2014=0.184)

- Krishnamoorthy, S. and **Muthugobal, B.K.N.**, “On Products of Conjugate Secondary Range k - Hermitian Matrices”, Global Journal of Pure and Applied Mathematics, Vol. 7 NO. 3 (2011), pp. 257-262. (**Impact factor:4.02**) https://www.ripublication.com/gjpamv7/gjpamv7n3_5.pdf

- Krishnamoorthy, S., Gunasekaran, K. and **Muthugobal, B.K.N.**, “On Conjugate Secondary Range k – Hermitian Matrices”, International J.of Math. Sci. & Engg. Appls. (IJMSEA), Vol. 5 No. I (January, 2011),pp.353- 364 [//efaidnbmnnnibpcajpcglclefindmkaj/http://www.ascent-journals.com/IJMSEA/Vol5No1/Paper-36.pdf](http://efaidnbmnnnibpcajpcglclefindmkaj/http://www.ascent-journals.com/IJMSEA/Vol5No1/Paper-36.pdf)

***(This paper is referred in “Mathematical review” R2791555(2012c:15072,15B57))**

- Krishnamoorthy, S., Gunasekaran, K. and Muthugobal, B.K.N., “On 3-Inverses of GM Matrix”, Ultra Scientist, Vol. 21(2) M, pp. 451-454 (2009), ISSN: 0970-9150. (Impactfactor:0.5) <https://www.ultrascientist.org/paper/1208/>
- Krishnamoorthy, S., Gunasekaran, K. and Muthugobal, B.K.N., “On 4-Inverses of GM Matrix”, Ultra Scientist, Vol. 21(2)M, pp.465-468 (2009). ISSN: 0970-9150. (**Impact factor: 0.5**) <https://www.ultrascientist.org/paper/1211/on-4-inverses-of-gm-matrix>
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