Athenaeum

BENNETT UNIVERSITY TIMES OF INDIA GROUP

LRC e-newsletter | Volume 2 | Issue 1 | April 2020



HIGHLIGHTS

- Guided overview of LRC resources, services, academic research activities
- Updating BU Fraternity about global research publication statistics in their respective research domains
- Work in interactive e-portal "Subject Guides" based on University Curriculum

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Special Issue: SEAS (Physics & Mechanical Engineering)

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Athenaeum

LRC e-Newsletter

April 2020 / Volume 2, Issue 1

MESSAGE FROM THE VICE-CHANCELLOR

I am glad to see LRC making it up even during this time of lockdown and coming up with Volume 2, Issue 1 of *Athenaeum*. I must appreciate the way LRC has come forward to provide remote access to e-resources (e-books, e-journals, and databases) and successfully conducted online training sessions for the faculty members and students. This issue of *Athenaeum* will reflect LRC's ongoing work on Subject Portal for the Department of Physics and Mechanical Engineering. Highlighting BU Publications, mapping of curriculum and research areas with subscribed and open access resources and other activities of the LRC. I encourage all members to effectively utilize the resources provided by the LRC.



Stay indoors ... Stay safe!

Dr. Raghunath K. Shevgaonkar

MESSAGE FROM THE LIBRARIAN

I present you all Volume 2, Issue 1 of Athenaeum (e-newsletter) which is covering information related to new learning resources, facilities and research publication statistics of the university. The second part of the



issue is focusing on mapping of teaching-learning resources for the Department of Physics and Mechanical Engineering so that faculty members and scholars from these departments can get access to their required resources at a single window. I am sure that the remote access of e-resources facility extended by LRC is supporting your teaching, research and scholarly activities during this critical time of lockdown.

Feel free to reach out to me for any kind of library support.

Stay indoors... Stay safe!

Dr. Sanjay Kataria

FACULTY TESTIMONIALS

I am delighted to see the visionary approach of LRC and the way it is functioning towards becoming the epicenter of information at



BU. LRC's e-newsletter is an endeavor to showcase all services, facilities and initiatives that it takes up from time-to-time. LRC has already stepped in towards extending its services through research support services, which includes data curation/management through digital repository, bibliometric services by which impact factors of prolific publishers/authors, etc. can be accessed

towards assisting research scholars in their research and boost the academic environment of the university. Even at the current time of lockdown, LRC has been extending its full support through the digital library platform. I hope faculty and students are taking full advantage of this facility.

> Dr. Krishna Thyagrajan HOD & Prof (*Physics*)

"Excellence is a continuous process and not an accident" – Dr. APJ Abdul Kalam



The LRC at BU is not only equipped with a well-designed state-of-the-art infrastructure but also evolving and expanding its services to meet the technological pedagogy. In this moment of global crisis, when the entire nation is in lockdown, LRC has expanded its digital services

and serving e-resources to the entire fraternity.

I wish Dr. Kataria and the entire team the very best in all its endeavors!

Dr. Vinayak Ranjan

HOD & Prof (Mechanical & Aerospace Engineering)

When the Entire World Fights Against COVID-19. Let's keep up the spirits... We Shall Overcome.

TESTIMONIALS

"When trouble strikes head to the library. You will either be able to solve the problem or simply have something to read. As the world crashes down around you," by Lemony Snicket. These lines perfectly describe LRC at Bennett. It is a place more than a library which provides all kind of academic solutions. It is updated on a regular basis to give better experience to the learner, and it's only possible due to a good team leader and an efficient team. The team not only support from the circulation desk but also indulges in many other support activities, probably followed by the best practices in the world. LRC also conducts various workshops to enhance the capability of researchers and the team as a whole. Even during the present lockdown due to Covid 19, LRC is providing a 24X7 services for uninterrupted learning.



Great Job LRC Team!!

Amrita Dixit

Research Scholar, ECE



The LRC and its team helps not only in campus but extends its support to students outside the campus too. I recently needed remote access to some journals during my internship, which I could with LRC's assistance. In the era of digital transformation, LRC's online presence ensures that we are well updated and informed irrespective of our geographical location. Regular updates via emails, easy to use self -help kiosks have all made LRC an integral part of my learning curve in Bennett.

Nandana Varshney B.Tech, 4th Year (CSE), E16CSE164

The first time I came to the library, I was welcomed with open arms of knowledge! Everyone at the library has been so helpful, be it locating books or placing a hold on a book and alike. The ambience of the LRC provides a perfect environment to focus and the technical facilities including self check-in and check-out facilities saves up my time. The LRC is pacing up with latest trends and we are hopeful that LRC space constraint will also be met soon.



Raghav Gupta

B. Tech, 1st Year (CSE), E19CSE258



A Brief Introduction

The LRC e-newsletter, *Athenaeum* connects and keeps the BU fraternity informed about all the resources, services, facilities and initiatives provided here. The first issue of the LRC e-newsletter mirrored statistics of all available resources and services and presented glimpses of LRC initiatives. Consecutively, the upcoming issues of *Athenaeum* are continually establishing connectivity with the user community of BU.

Highlight of our 4th special issue features research support services initiated by the LRC, where the aim is to map the learning resources based on curriculum under "Subject Guide," in LRC's web portal (this time for School of Engineering—(Mechanical & Physics) in one window.

Resource Collection (All 4 Schools)

NEW ARRIVALS (SEP '19-FEB '20) 296 206 131 138 36 Sep Oct Nov Dec Jan Feb

Subscribed Resources

PRINT MAGAZINES

- **♦ Data Quest**
- **♦** Digit
- **♦ Electronics for You**
- **♦ Open Source**
- **♦ Frontline**
- ♦ India Today
- **♦ Time**
- ♦ Voice & Data
- **♦PC Quest**

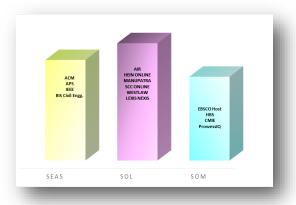
- **♦** Business Today
- ♦ Competition Success Review
- ♦ Femina
- **♦** Filmfare
- **♦** Mainstream
- ♦ Outlook
- **♦ Outlook Traveller**
- ♦ Pratiyogita Darpan
- **♦** Reader Digest
- ♦ Sport Star
- **♦ The Economist**
- **♦** The Week
- ♦ Yojana

LRC Website



Resource Stats (Till Feb '20)

Titles	5882
Volumes	19136
Print Journals	12
Print Magazines	36
Newspapers	48
Back Volumes	42
Advanced Printers	2
CCTVs	8
Computers	34
Seating Capacity	200
Staff Members	9
CD/DVD	300+
e-Resources	3 Lacs+
Library Management Software	Koha v17
Institutional Repository Software	Dspace v5.5



Subscribed e-Resources

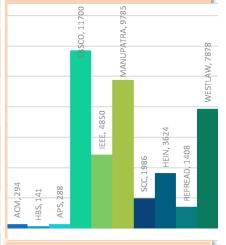
To know more, visit LRC Website

E-Resources / Databases

School	Resources	Content Coverage		
	IEEE (ASPP+POP)	◆ Journals (196+), Conference Proceedings (2069+)		
SEAS	Association of Computing Machinery (ACM)	◆ Journals (8), Magazines (10), Hosted Content (10), Newsletter (69), Conference Proceeding Titles (1003), Transactions (42)		
		◆ ACM publication (10), Newsletter (69)		
	American Physical Society (APS)	◆ 13 e-journals Physics Database + ESS approved package		
	EBSCO Host	 ◆ Full text Journals (1919), Magazine (892), Trade Publication (933) ◆ Leading Business Journals etc. 		
SOM	CMIE	♦ ProwessIQ is an interactive querying system to find companies from the Prowess database. It consists of a client software that provides an interface to construct and submit queries over the internet to the Prowess database and receive answers to the queries from the database		
Harvard Business School (HBS)		 Over 10,000+case studies from Harvard Business School. 30+ partner Institutes case collection. 		
	AIR Legal Database	♦ Journals (7) Print + AIR Supreme Court, High Court, (1950-2018) AIR Privy Council, Central Acts and Rules.		
	Manupatra Legal Database	♦ Legal databases including cases, e-books, e- journals, bills, articles, orders of the tribunals, Cen- tral and State Acts etc.		
	SCC Online	◆ Legal database, Reports, Acts, Judgements, Privy Council, Federal Court, All Hight Courts, Central Statutes with Rules, Articles etc. (National)		
LAW	Hein online	◆ Legal database 2100+ Law Periodicals, US Reports (International)		
	Lexis Nexis	◆ Lexis advance—Legal Research Platform (Legal database, Cases, Acts etc.)		
		♦ The Westlaw has content covering primary and secondary sources from India, UK, Australia, Canada, Hong Kong, USA.		
	Westlaw	◆ Case Law, Legislation, Law Reviews, Journals (1200+ Journals) Treatises, Legal Encyclopedias, Editorially enhanced and reliable content - head notes, citations and legal update alerts		
		♦ 9000 full text Open Access Journals indexed with subscribed e-journals		
ALL	Refread online	♦ Browsing list of all subscribed e-resources by Publishers		
	Digital Library	 Search integration of all subscribed resources. Remote access (Of campus access for 500 users) 		
		◆ Customized iOS and Android library Mobile App.		

Database Usage Statistics (Jul 2019-Feb 2020)

e-Resource	Download
ACM	294
APS	288
EBSCO	11700
Hein Online	3624
IEEE	4850
Manupatra	9785
SCC Online	1986
Refread	7586
WestlLaw	7878
HBS	141



Important Links

School wise E-Journals

A-Z List of E-Journals

New Arrivals

News & Notices

Upcoming Events

Tutorials

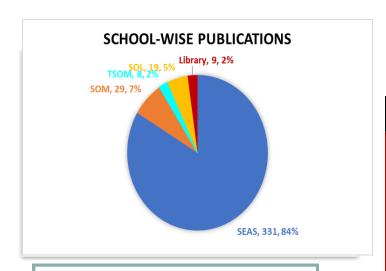
<u>FAQs</u>

BU PUBLICATIONS

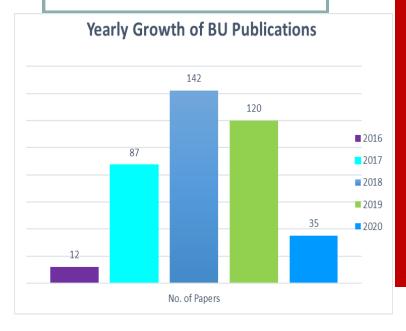
LRC established a digital institutional repository, namely, the DRS@BU for archiving research output (including Journal articles, Working papers, Conference papers, Book chapters, Reports, Theses / Dissertations, and other scholarly publications) of the University.

At present DRS@BU contains a total of **396** BU publications and is growing.

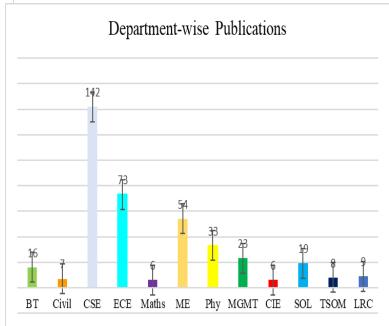
Detailed tutorial for uploading documents at DRS@BU is given on *DRS@BU website*.



Yearly Growth of BU Publications



Department-wise Publications



Category-wise Distribution of Publications

School	Document Type	Publica- tion
	Book & Conference Proceedings	2
	Book Chapters	13
SEAS	Conference Papers	99
	Journal Papers	214
	Papers in arXiv Repository	3
	Book Chapters	4
SOL	Book Review	1
	Journal Papers	14
	Book & Conference Proceedings	1
SOM	Book Chapters	4
	Conference Papers	2
	Journal Papers	22
	Book Chapters	1
TSOM	Conference Papers	3
	Journal Papers	4
	Book & Conference Proceedings	1
	Book Chapters	1
Library	Conference Papers	6
	Journal Papers	1

High Impact Factor (IF) BU Publications

S.No	Name of Faculty	Depart- ment	Title of Article/Book	Title Journal/ Conference	Impact Factor	Year
1	Hiren Kumar Thakkar	CSE	MUVINE: Multi-Stage Virtual Network Embedding in Cloud Data Centers using Reinforcement Learning Based Predictions	IEEE Journal on Selected Areas in Communications	9.302	2020
2	Vinit Jakhetiya	CSE	A prediction backed model for quality assess- ment of screen content and 3-D synthesized images	IEEE Transactions on Industrial Informatics	7.377	2017
3	Shivani Goel	CSE	Plants disease identification and classification through leaf images: A survey	Archives of Computational Methods in Engineering	7.242	2018
4	Vinit Jakhetiya	CSE	Model-Based Referenceless Quality Metric of 3D Synthesized Images Using Local Image Description	IEEE Transactions Image Processing	6.79	2018
5	Bishnu P Pal	Physics	Design of chip scale silicon rib slot waveguide for sub-ppm detection of N_2O gas at mid-IR band	Sensors and Actuators B: Chemical	6.393	2018
6	Deepali Atheaya	Physics	Thermodynamic analysis of Organic Rankine cycle driven by reversed absorber hybrid photovoltaic thermal compound parabolic concentrator system	Renewable Energy	5.439	2020
7	Saurabh Jyoti Sarma	Biotechnolo- gy	Carbon, Nitrogen and Phosphorus Removal Mechanisms of Aerobic Granules	Critical Reviews in Biotechnology	5.239	2018
8	Shivani Goel	CSE	Local Graph Based Correlation Clustering	Knowledge-Based Systems	5.101	2017
9	Visalakshi Tala- kokula	Civil Engi- neering	Monitoring early hydration of reinforced concrete structures using structural parameters identified by piezo sensors via electromechanical impedance technique	Mechanical Systems and Signal Processing	5.005	2018
10	Joy Pal	Civil Engi- neering	Damage-induced acoustic emission source identification in an advanced sandwich composite structure	Composite Structures	4.829	2018
11	Vinayak Ranjan	Mechanical	Free vibration analysis of thin functionally grad- ed rectangular plates using the dynamic stiffness method	Composite Structures	4.829	2018
12	Milind Shrikant Padalkar	Management	Six decades of project management research: Thematic trends and future opportunities	International Journal of Project Management	4.694	2016
13	Deepali Atheaya	Mechanical	Energy and exergy analysis of solar driven recu- perated organic Rankine cycle using glazed reverse absorber conventional compound para- bolic concentrator (GRACCPC) system	Solar Energy	4.674	2017
14	Shivani Goel	CSE	SP-J48: a novel optimization and machine- learning-based approach for solving complex problems: special application in software engi- neering for detecting code smells	Neural Computing and Applications	4.664	2019
15	Gaurav Shukla	Physics	Bullen's Parameter as a Seismic Observable for Spin Crossovers in the Lower Mantle	Geophysical Research Letters	4.58	2017

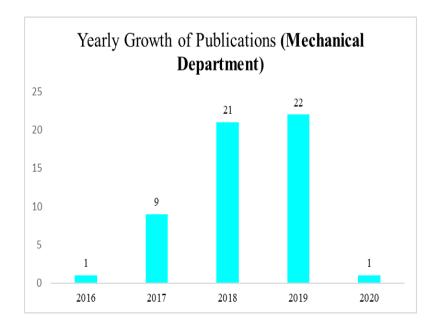
"COVID-19, also known as Mother Nature's Revenge!" - Steven Magee

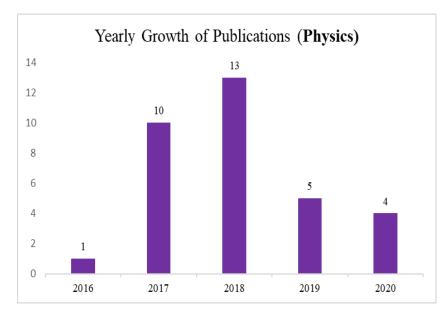
Special Issue for School of Engineering (Mechanical & Physics)

This issue of *Athenaeum* features the implementation of customized mapping of LRC resources for SEAS aimed at leveraging teaching, learning and academic research in BU. All learning materials are categorized and customized according to course curriculum and linked on Subject Guide Portal for a single window access.

For **scholars and faculty** – an exaggerated and complete guide in literature search on subscribed resources / available databases, open-access resources, h-index citations, in-house publications, subject guide, which are customized course-related information, etc.

For more information, please logon to https://library.bennett.edu.in/sg/subjects/index.php





Name of Faculty No. of Publications MECHANICAL ENGINEERING Vinayak Ranjan 31 Deepali Atheaya 14 Prabhakar Sathujoda 5 Mohammad Danish 4 Ashish Kumar 3 **PHYSICS** Bishnu P. Pal 8 Alok Shukla 6 K. Thyagarajan 5 Ayan Khan 4

Prolific Authors (Mechanical & Physics)

Mechanical Engineering			
Type of Publication	No. of Papers		
Journal Papers	48		
Conference Papers	5		
Book Chapters	1		
Physics			
Journal Papers	24		
Conference Papers	7		
Book Chapters	1		
Papers in arXiv Repository	1		

2

Gaurav Shukla

Research@ BU

Special Issue: SEAS

SEAS Publications in DRS @ BU (Mechanical & Physics)

Mechanical Engineering				
Name of Faculty	Title of Article	Title Journal	IF	Year
Deepali Atheaya	Thermodynamic analysis of Organic Rankine cycle driven by reversed absorber hybrid photovoltaic thermal compound parabolic concentrator system	Renewable Energy	4.9	2020
Deepali Atheaya	Energy and exergy analysis of solar driven recuperated organic Rankine cycle using glazed reverse absorber conventional compound parabolic concentrator (GRACCPC) system	Solar Energy	4.374	2017
Vinayak Ranjan	Free vibration analysis of thin functionally graded rectangular plates using the dynamic stiffness method	Composite Structures	4.101	2018
Vinayak Ranjan	Finite element modelling and analysis of the burst margin of a gas turbine disc using an area weighted mean hoop stress method	Engineering Failure Analysis	2.157	2017
Pawan Mishra, Vinayak Ranjan	Performance Evaluation of Jaipur Knee Joint through Kinematics and Kinetics Gait Symmetry with Unilateral Transfemoral Indian Amputees	Journal of Medical Systems	2.098	2019
Vinayak Ranjan	Theoretical and Numerical Estimation of Vibroacoustic Behavior of Clamped Free Parabolic Tapered Annular Circular Plate with Different Arrangement of Stiffener Patches	Applied Science	1.689	2018
Vinayak Ranjan	Comparison for the Effect of Different Attachment of Point Masses on Vibroacoustic Behavior of Parabolic Tapered Annular Circular Plate	Applied Sciences-Basel	1.689	2019
Vinayak Ranjan	Vibration analysis of a thin functionally graded plate having an out of plane material inhomogeneity resting on Winkler–Pasternak foundation under different combinations of boundary conditions	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineer- ing Science	0.996	2018
Vinayak Ranjan	Rolling contact fatigue life of rail for different slip conditions	Latin American Journal of Solids and Structures	0.905	2017
	Physics			
Bishnu P Pal	Design of chip scale silicon rib slot waveguide for sub-ppm detection of $N_2\text{O}$ gas at mid-IR band	Sensors and Actuators B: Chemical	5.667	2018
Alok Shukla	From Half-Metal to Semiconductor: Electron-Correlation Effects in Zigzag SiC Nanoribbons from First Principles	Physical Review Applied	4.782	2017
Alok Shukla	Tunable Optoelectronic Properties of Triply Bonded Carbon Molecules with Linear and Graphyne Substructures	J. Phys. Chem. C	4.484	2017
Gaurav Shukla	Bullen's Parameter as a Seismic Observable for Spin Crossovers in the Lower Mantle	Geophysical Research Letters	4.339	2017
Alok Shukla	Origin of multiple band gap values in single width nanoribbons	Scientific Reports	4.122	2016
Bishnu P Pal	Role of Resonance Modes on Terahertz Metamaterials based Thin Film Sensors	Scientific Reports	4.122	2017
Alok Shukla	Tunable electronic properties of partially edge-hydrogenated armchair boron- nitrogen-carbon nanoribbons	Physical Chemistry Chemical Physics	3.906	2018
Alok Shukla	Electron correlation effects and two-photon absorption in diamond-shaped graphene quantum dots	Physical Review B	3.813	2018
Swarup K Panda	Charge disproportionate antiferromagnetism at the verge of the insulator-metal transition in doped LaFeO3	Physical Review B	3.813	2019
Swarup K Panda	Pronounced 2/3 magnetization plateau in a frustrated S = 1 isolated spin-triangle compound: Interplay between Heisenberg and biquadratic exchange interactions	Physical Review B	3.813	2019

Special Issue: SEAS (Physics)

The aim of mapping learning resources is to ease our faculty members and scholars and enhance their research output in their respective domain by providing an overview of global research productivity. This service will be based on bibliometric analysis of research data available in research databases (SCOPUS and Web of Science), which will include top-cited publications, prolific authors, highest impact factor journals, countries, collaborations, etc. In this e-newsletter, a brief summary is presented for each SOM faculty members and detailed information will be available on Subject Guide Portal at

https://library.bennett.edu.in/sg/subjects/index.php

Top 10 Cited Papers in Guided Wave Quantum Optics



Dr. Krishna Thyagarajan

Research Areas: Guided wave quantum optics; .Nonlinear effects in optical waveguides; Optical fibre amplifiers and Optical waveguide gratings.

Chen, W., Ning, H., Li, J., Mao, X., & Wang, B. (2009). Flight path detection of bird targets in radar images. *Chinese Journal of Electronics*, 18(1), 192–194.

Chalker, J., & Mlmer, K. (1993). Monte Carlo wave-function method in quantum optics. Quantum, 10(3), 524-538.

Brus, L., Laboratories, T. B., & Hill, M. (1991). Brus 1991.pdf, 74.

Jean, D., Yvan, C., & Klaus, M. (1992). Wave-Function Approach to Dissipative Processes in Quantum Optics. *Physical Review Letters*, 68(5), 580–583.

Duan, L. M., Lukin, M. D., Cirac, J. I., & Zoller, P. (2001). Long-distance quantum communication with atomic ensembles and linear optics. *Nature*, 414(6862), 413–418. https://doi.org/10.1038/35106500

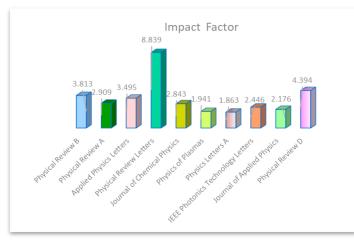
Pullin, J. (1999). Nonstandard optics from quantum space-time. *Physical Review D - Particles, Fields, Gravitation and Cosmology*, 59 (12), 1–4. https://doi.org/10.1103/PhysRevD.59.124021

Grundler, D. (2000). Large Rashba Splitting in InAs Quantum Wells due to Electron Wave Function Penetration into the Barrier Layers. *Physical Review Letters*, 84(26), 6074–6077. https://doi.org/10.1103/PhysRevLett.84.6074

Ivanov, D. A. (2001). Non-Abelian statistics of half-quantum vortices in p-wave superconductors. *Physical Review Letters*, 86(2), 268–271. https://doi.org/10.1103/PhysRevLett.86.268

Sangouard, N., Simon, C., De Riedmatten, H., & Gisin, N. (2011). Quantum repeaters based on atomic ensembles and linear optics. *Reviews of Modern Physics*, 83(1), 33–80. https://doi.org/10.1103/RevModPhys.83.33

Chang, D. E., Sørensen, A. S., Hemmer, P. R., & Lukin, M. D. (2006). Quantum optics with surface plasmons. *Physical Review Letters*, 97(5), 1–4. https://doi.org/10.1103/PhysRevLett.97.053002



Top 10 Journals

Authors	Affiliation	Country
RAZEGHI M	Northwestern Univ	USA
SHUKLA PK	Ruhr Univ Bochum	Germany
SLIVKEN S	Northwestern Univ	USA
CAPASSO F	Harvard Univ	USA
FAIST J	AT&T BELL LABS	USA
FAN HY	Univ Sci & Technol China	China
EVANS A	Northwestern Univ	USA
YU JS	Northwestern Univ	USA
MISRA AP	Visva Bharati Univ	India
RITCHIE DA	Univ Cambridge	England

Top 10 Authors

Special Issue: SEAS



Dr. Poulomi Sadhukhan

Research Areas: Response of biopolymer assemblies under force and relaxation; Phases and phase transitions of DNA; Quantum entanglement and its

connection to interacting polymers.

Top 10 Cited Papers in Response of biopolymer assemblies under force and relaxation

Sellinger, A., Weiss, P. M., Nguyen, A., Lu, Y., Assink, R. A., Gong, W., & Brinker, C. J. (1998). Continuous self-assembly of organic -inorganic nanocomposite coatings that mimic nacre. *Nature*, *394*(July).

Fowler, D. M., Koulov, A. V., Alory-Jost, C., Marks, M. S., Balch, W. E., & Kelly, J. W. (2006). Functional amyloid formation within mammalian tissue. *PLoS Biology*, 4(1), 0100–0107. https://doi.org/10.1371/journal.pbio.0040006

Hatton, B., Mishchenko, L., Davis, S., Sandhage, K. H., & Aizenberg, J. (2010). Assembly of large-area, highly ordered, crack-free inverse opal films. *Proceedings of the National Academy of Sciences of the United States of America*, 107(23), 10354–10359. https://doi.org/10.1073/pnas.1000954107

Kharlampieva, E., Koziovskaya, V., & Sukhishvili, S. A. (2009). Layer-by-layer hydrogen-bonded polymer films: From fundamentals to applications. *Advanced Materials*, *21*(30), 3053–3065. https://doi.org/10.1002/adma.200803653

Meibom, K. L., Blokesch, M., Dolganov, N. A., Wu, C. Y., & Schoolnik, G. K. (2005). Microbiology: Chitin induces natural competence in vibrio cholerae. *Science*, 310(5755), 1824–1827. https://doi.org/10.1126/science.1120096

Rajangam, K., Behanna, H. A., Hui, M. J., Han, X., Hulvat, J. F., Lomasney, J. W., & Stupp, S. I. (2006). Heparin binding nanostructures to promote growth of blood vessels. *Nano Letters*, 6(9), 2086–2090. https://doi.org/10.1021/nl0613555

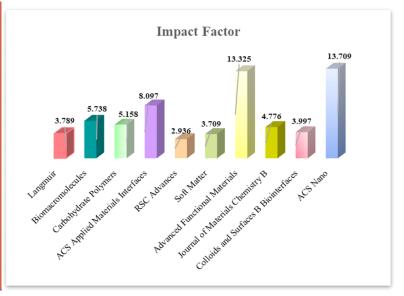
Solon, J., Levental, I., Sengupta, K., Georges, P. C., & Janmey, P. A. (2007). Fibroblast adaptation and stiffness matching to soft elastic substrates. *Biophysical Journal*, *93*(12), 4453–4461. https://doi.org/10.1529/biophysj.106.101386

Um, S. H., Lee, J. B., Park, N., Kwon, S. Y., Umbach, C. C., & Luo, D. (2006). Enzyme-catalysed assembly of DNA hydrogel. *Nature Materials*, 5(10), 797–801. https://doi.org/10.1038/nmat1741

Warner, M. G., & Hutchison, J. E. (2003). Linear assemblies of nanoparticles electrostatically organized on DNA scaffolds. *Nature Materials*, 2(4), 272–277. https://doi.org/10.1038/nmat853

Yin, P., Choi, H. M. T., Calvert, C. R., & Pierce, N. A. (2008). Programming biomolecular self-assembly pathways. *Nature*, 451 (7176), 318–322. https://doi.org/10.1038/nature06451

Authors	Affiliation	Country
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DARDER M	CSIC, Inst Ciencia Mat Madrid	Spain
WANG Y	Sun Yat Sen Univ	China
ARANDA P	CSIC, Inst Ciencia Mat Madrid	Spain
LI Y	Jiangnan Univ	China
PAYNE GF	Univ Maryland	USA
RAGHAVAN SR	Univ Maryland	USA
RUIZ-HITZKY E	CSIC	Spain
LIU Y	Northwestern Polytech Univ	China



Top 10 Authors

Top 10 Journals



Dr. Soumyendu Roy

Research Areas: Material Science; Nanotechnology: Synthesis, modification and applications of Nanomaterials; Photovoltaics: Dye Sensitised Solar Cell, Perovskite Solar Cells; Sensors,

Bio-medical devices like Artificial Retina; Electronics: Field emitters, Transistors, etc. built from Nanomaterials; Electrochemistry Application of Plasma and Microwaves in Material Science

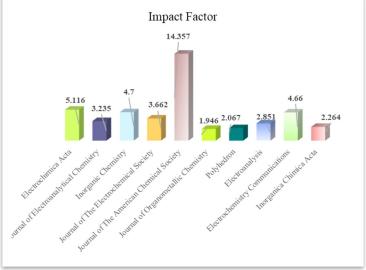
Special Issue: SEAS

Top 10 Cited Papers in Electrochemistry

- Ding, Z., Quinn, B. M., Haram, S. K., Pell, L. E., Korgel, B. A., & Bard, A. J. (2002). Electrochemistry and electrogenerated chemiluminescence from silicon nanocrystal quantum dots. Science, 296(5571), 1293-1297. https://doi.org/10.1126/science.1069336
- Gooding, J. J. (2005). Nanostructuring electrodes with carbon nanotubes: A review on electrochemistry and applications for sensing. Electrochimica Acta, 50(15), 3049–3060. https://doi.org/10.1016/j.electacta.2004.08.052
- Kang, X., Wang, J., Wu, H., Aksay, I. A., Liu, J., & Lin, Y. (2009). Glucose Oxidase-graphene-chitosan modified electrode for direct electrochemistry and glucose sensing. Biosensors and Bioelectronics, 25(4), 901–905. https://doi.org/10.1016/j.bios.2009.09.004
- Ohzuku, T. (1989). Electrochemistry of Manganese Dioxide in Lithium Nonaqueous Cell. Journal of The Electrochemical Society, 136 (11), 3169. https://doi.org/10.1149/1.2096421
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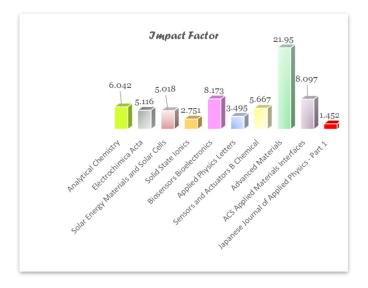
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Research Areas: Solid State Nano-pore Devices for Biomolecule Detection; Fabrication & Characterization of Functional Nanostructures for MEMS &

Optoelectronic Devices.; Single, Poly- & Nano-crystalline Diamonds for their Applications in Semiconducting & Research Industries.

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BARBOSA PC	Univ Minho	Portugal
CAO Y	Sichuan Univ	China
сни v	INESC Microsistemas & Nano- tecnol	Portugal

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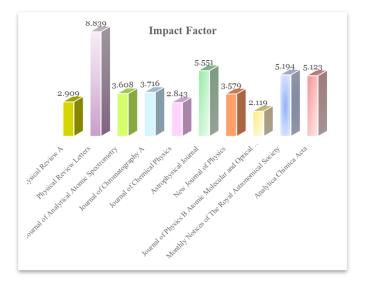


Dr. Ayan Khan

Research Areas: Ultra-cold Atomic Gases (BCS-BEC Crossover); Nonlinear Equations and Integrable Systems; Strongly Correlated Systems.

Top 10 Cited Papers in Ultra-cold Atomic Gases (BCS-BEC Crossover)

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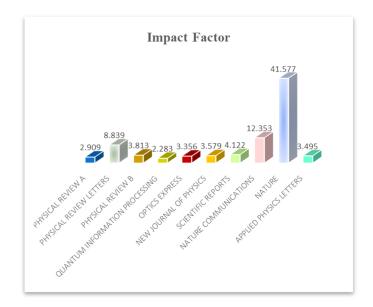
Dr. Rama Koteswara Rao Kamineni

Research Areas: Quantum Information Processing; Quantum Technologies using Nitrogen-Vacancy centers in diamond; Nuclear Magnetic Resonance.

Top 10 Cited Papers in Quantum Information Processing

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Dr. Swarup Panda

Research Areas: Theoretical and Computational Condensed Matter; Physics, Studying and designing exotic correlated materials using first-principles approaches; Electronic structure, Magnetism

and Spin-Orbit physics in transition-metal and rare earth compounds; Nanomanetism using ab-initio many-body techniques such as LDA+DMFT Low dimensional spin-systems Calculations of Hubbard U from first-principles: constrained RPA

Top 10 Cited Papers in Theoretical and Computational Condensed Matter Physics

Kresse, G., & Furthmüller, J. (1996). Efficient iterative schemes for ab initio total-energy calculations using a plane-wave basis set. *Physical Review B*, *54*(16), 11169–11186. https://doi.org/10.1103/PhysRevB.54.11169

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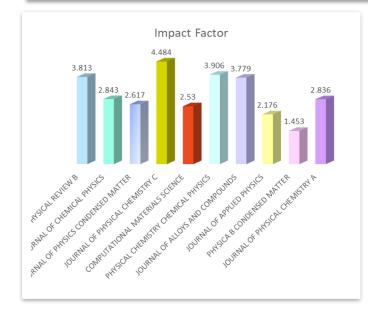
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Dr. Vinayak Ranjan

Research Areas: Vibro-acoustic piezoelectric energy harvesting with plate structures; Dynamic interaction of the wheel rail contact, Structural analysis with finite element method, dynamic stiffness method,

Rayleigh Ritz method; Mechanics of knee prosthesis Design; Design of flame proof apparatus for mines.

Special Issue: SEAS

Top 10 Cited Papers in Dynamic interaction of the wheel rail contact

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Braghin, F., Lewis, R., Dwyer-Joyce, R. S., & Bruni, S. (2006). A mathematical model to predict railway wheel profile evolution due to wear. *Wear*, 261(11–12), 1253–1264. https://doi.org/10.1016/j.wear.2006.03.025

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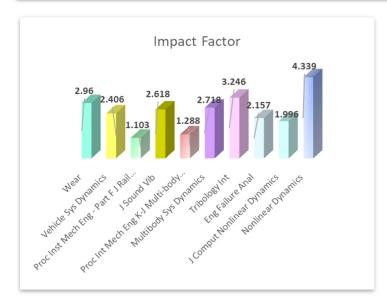
Shabana, A. A., Zaazaa, K. E., Escalona, J. L., & Sany, J. R. (2004). Development of elastic force model for wheel/rail contact problems. *Journal of Sound and Vibration*, 269(1–2), 295–325. https://doi.org/10.1016/S0022-460X(03)00074-9

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Uhl, T. (2007). The inverse identification problem and its technical application. *Archive of Applied Mechanics*, 77(5), 325–337. https://doi.org/10.1007/s00419-006-0086-9



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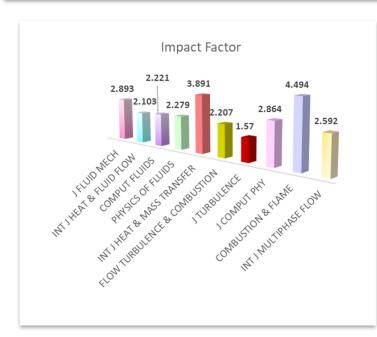
Dr. Mohammad Danish

Research Areas: Direct numerical simulations of compressible and incompressible turbulent flows. Multiscale analysis of turbulence.

Lagrangian-based analysis and modeling of velocity gradients in turbulence.

Top 10 Cited Papers in DNS of compressible and incompressible turbulent flows.

- Moser, R. D., Kim, J., & Mansour, N. N. (1999). Direct numerical simulation of turbulent channel flow up to Reτ=590. *Physics of Fluids*, 11(4), 943–945. https://doi.org/10.1063/1.869966
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LI XL	Chinese Acad Sci	China

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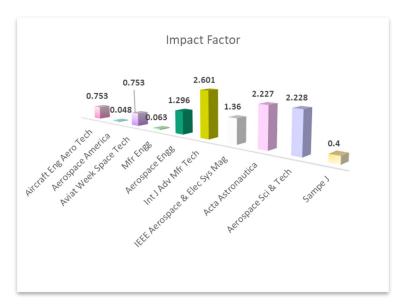
Dr. Prabhakar Sathujoda

Research Areas: Application of finite element analysis to aerospace and mechanical structural problems Rotor dynamics and vibration analysis Fatigue, fracture and damage tolerance in the mechanical & aerospace

domain Natural fibre composites.

Top 10 Cited Papers in Application of finite element analysis to aerospace and mechanical structural problems

- Boyer, R. R. (1996). An overview on the use of titanium in the aerospace industry. *Materials Science and Engineering: A*, 213(1–2), 103–114. https://doi.org/10.1016/0921-5093(96)10233-1
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Authors	Affiliation	Country
VELOCCI AL	Aviation Week & Space Technology	USA
МЕСНАМ М	Aviation Week & Space Technology	USA
SARHAN AAD	Univ Malaya	Malaysia
GERADA C	Univ Nottingham	England
HAMDI M	Univ Malaya	Malaysia
WINTER FH	NATL AIR & SPACE MU- SEUM	USA
ZALNEZHAD E	Islamic Azad Univ	Iran
DAVIS NW	University of California - Davis	USA
GALEA M	Univ Nottingham	England
KLADAS AG	Natl Tech Univ Athens	Greece

Top 10 Journals

Special Issue: SEAS

Research Mapping



of

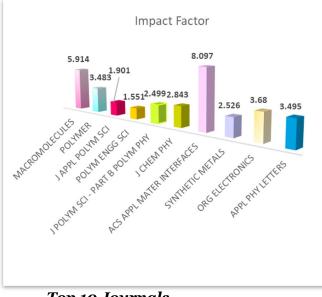
processing

Dr. Neelanchali Asija Bhalla

Research Areas: Manufacturing and testing of composite materials; High strain rate testing using split Hopkinson pressure bar; Bullet proof material systems development; Polymer blends; Synthesis and characterization of Nanocomposites; Rheology of non-Newtonian fluids and its applications in Ballistics

Top 10 Cited Papers in Polymer processing of blends

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Top 10 Journa

Authors	Affiliation	Country
HAN CC	Natl Inst Stand & Technol	USA
FAVIS BD	Ecole Polytech	Canada
CAO Y	S China Univ Technol	China
KIM J	Kongju Natl Univ	South Korea
KARIM A	Natl Inst Stand & Technol	USA
MACOSKO CW	Univ Minnesota	USA
PAINTER PC	Penn State Univ	USA
LEE J	Pohang Univ Sci & Technol POSTECH	South Korea
RAJENDRAN S	Alagappa Univ	India
INOUE T	Tokyo Inst Technol	Japan

Special Issue: SEAS

Research Mapping



Dr. Deepali Atheaya

Research Areas: Solar-thermal technologies and non-conventional energy resources; Manufacturing processes, ergonomics and quality

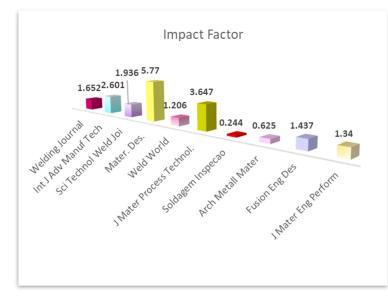
control; Advanced welding technology.

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Deng, D., & Murakawa, H. (2008). Prediction of welding distortion and residual stress in a thin plate butt-welded joint. *Computational Materials Science*, 43(2), 353–365. https://doi.org/10.1016/j.commatsci.2007.12.006

technology

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LI H	Tianjin Univ	China
LIU LM	Dalian Univ Technol	China
LIU ZH	Chinese Acad Sci	China
REISGEN U	Rhein Westfal TH Aachen	Germany
WANG J	Univ Oklahoma	USA
ZHANG Y	Ohio State Univ	USA
DUTRA JC	Univ Fed Santa Catarina	Brazil
EIFLER D	Univ Kaiserslautern	Germany

Top 10 Journals

Special Issue: SEAS



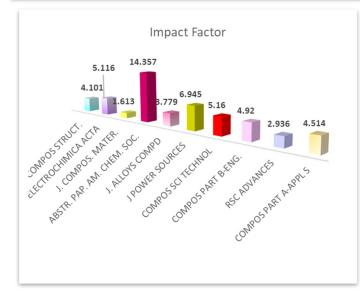
Mr. Baij Nath Singh

Research Areas: Composite Materials Impact Tastings; Crash Testing; Dynamic and Static Analysis Vibroacoustic; Sound Radiation (FGM & Composites); Finite Element

Analysis (FEA).

Top 10 Cited Composite Materials

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LIU Y	Univ Chinese Acad Sci	China
LI Y	Jilin Univ	China
ZHANG L	Natl Res Council Canada	Canada
LI J	Beijing Key Lab Fine Ceram	China
ZHANG J	S China Univ Technol	China
WANG L	Univ Sheffield	England
YANG J	Shanghai Jiao Tong Univ	China

Top 10 Journals





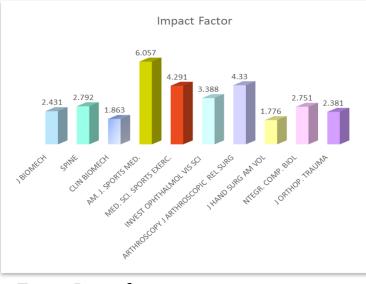
Mr. Pawan Mishra

Research Areas: Human motion analysis for healthy and disabled persons; Bio Mechanics Gait Analysis; Posture Analysis; Prosthesis design improvement; Kinematics and Kinetics

analysis of prosthetic knee joint.

Top 10 Cited Papers in Bio Mechanics

- Zajac, F. E. (1989). Muscle and tendon: properties, models, scaling, and application to biomechanics and motor control. *Critical Reviews in Biomedical Engineering*, 17(4), 359–411. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/2676342
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Authors	Affiliation	Country
LEE TQ	Univ Calif Irvine	USA
AN KN	Mayo Clin	USA
CRAWFORD NR	St Josephs Hosp	USA
GREGERSEN H	Chongqing Univ	China
MCGARRY MH	VA Long Beach Healthcare Syst	USA
LAPRADE RF	Univ Minnesota	USA
ZHANG Y	Univ Sci & Technol Bei- jing	China
SCHEMITSCH EH	Univ Toronto	Canada
AUBIN CE	Ecole Polytech Montreal	Canada
GUEORGUIEV B	AO Res Inst Davos	Switzerland

Top 10 Journals

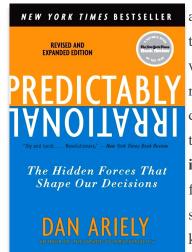
Top 10 Authors

STUDENTS' CORNER

Book Review

Predictably Irrational: The Hidden Forces That Shape Our Decisions

Exploring the above-mentioned quote, Dan Ariely in this book is presenting the idea of how ration-



al we believe we are and how irrationally we behave. The book is far from monotony as the real-life experiments bind the reader and it gets impossible to divert one's attention without completing the chapter. The book is divided into 13 chapters, each exploring a new aspect and giving a new perspective on life and the habits we follow in our day-to-day life, giving answers to unconventional questions as "Whether it is possible to be a totally honest being?" or "How does the decay effect works?" 'A deep dive into the irrationality of human beings' that's how I would explain this book in a line. How faulty we are in our beliefs and action, what we expect and what we do, how we follow some norms traditionally without knowing the truth about them and how naïve is our knowledge about the functionality of the brain which commands and make rules for us and that too subconsciously. Such ideas are being explored in the book with lots and lots

of real-life experiments that the author and his fellows have performed over the years. If one wants to dive deep into the process of making decisions, the fallacies we have been continuing since generation or is interested in a new perspective of life then this is the book for them. Concepts such as **Zero Cost Effect, Supply Demand Fallacy, Placebo Effect** and Expectations vs Perspective are being discussed. The human tendency to enjoy the free stuff, the thrill behind gambling and the game of faith we are deep stuck into are scrutinized throughout. It is one of a kind book as it inspects human nature such as **Split Personality**: What we are and how we present, the Honesty Factor with the role of Religion in it and how the presence of others influences our decisions. The author has tried to make it closer to the reader as much as possible but at times the references from other books go out of context. It is a feast for **Shakespeare lovers** as the author is highly influenced by the ideas and at times appraises and criticizes them with references from classics such as "Hamlet". Some chapters even explore the trending topics such as pollution and the collective wrong approach by government and companies to curb it. How ineffective we are in action and how versatile in words that's what the writer presents to us the basic in the chapters exploring

these themes. **Behavioural Economics** is the topic the book dives deep into. The right approach to life and breaking the self-made bad conventions is what the author teaches us. The book helps us to understand the need to sort priorities in today's advancing world, the need for decision making power, the self-discipline and self-control we need to implement in our lives to be a better and successful being and how adversely the inability to make decisions can affect us. Hence it's a modern guide to the modern generation who are though advanced yet lack in some extremely essential areas and domains undoubtedly required for a better life. A moral not so easy to forget: -" **Individuals are honest only to the extent that suits them.**"

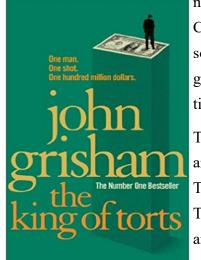


Kartikay Bansal E18CSE085, 2nd year, SEAS

Book Review

The King of Torts

The King of Torts was a caption given in a newspaper to our main antagonist, Clay Carter when he gained over-



night success thanks to an anonymous tip. The whole book revolves around Clay Carter who is in love with Rebecca van Horn. The van Horn family are much more sophisticated and more poised than Clay and disapproved him. Clay has an eternal ongoing struggle of trying to impress his parents and living up to his father's expectations.

This book like all of John Grisham's books doesn't really get to any exact legal issues and highlights the fact that lawyers aren't all concerned about welfare of the society. The book only has one real court case which the readers are told about at the end. There is a show of large-scale advertising for clients against certain drug companies and an obscene amount of money shown here.

One can say the moral of the story is that anything that comes easy isn't worth it as Clay gets lucky and successful due to an anonymous tip from a repeat offender and when Clay dabbles in the stock market, it becomes unethical. Clay gets rich overnight and since he did jump the boat as public prosecutor to establishing his own law firm, we see how the people in need of justice are left behind to fend for themselves. When Clay begins to face too many overheads and has spent all his money in an unsuccessful PIL he loses a lot of money and thus goes behind a brick and cement company that only leads shut down of his law firm and then he loses his legs when the now unemployed people of the brick company attacks him. Clay is seen taking whatever that is left of his fortune and his girlfriend Rebecca and escaping to Europe. Both of them are thinking of a different future but both of them are running away from the so-called "American Dream" never to return.

This book was the first ever John Grisham that I ever read and at that point of time in my life I had never imagined myself in legal livery. Seeing it here after such a long time was indeed nostalgic. I had come a long way from home

and this book had greeted me in the Law library, into the legal field. To start afresh, moving away from Science and all it's curious complexities into the humble and solemn black and white just like Clay who had escaped his past to start afresh in a different land. Life has a beautiful, crazy design

And time seemed to say

Forget the world and all its weight

And here I just want to say... Amazing day.

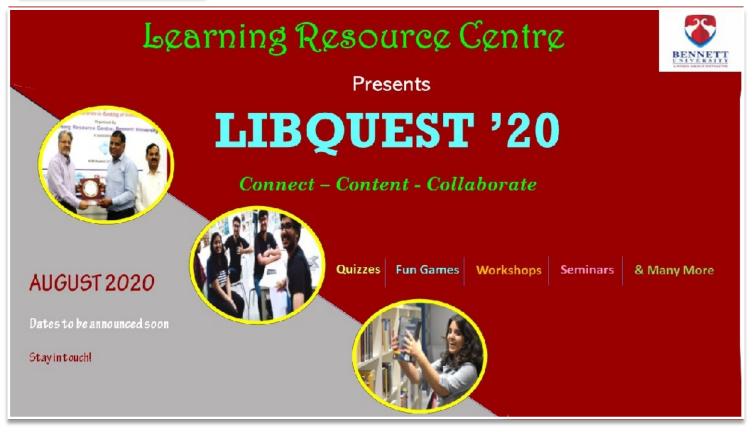
~Coldplay



Hiranya Bhandarkar L19BALB003, 1st year, SOL

Upcoming Events @ LRC

LibQuest '20



Break the mundane & tinker your thought with a spice of fun & creativity! LRC opens an innovative twist & turn to break your daily monotony.

Once more, we are coming up with LibQuest '20 with more games & double fun. LibQuest '20 is an initiative by the Learning Resource Centre (LRC) at Bennett University to *Connect* BU Fraternity with their desired *Content* and *Collaborate* with them for the fulfillment of academic and research need.

It will be a week-long program, and include various infotainment activities, quizzes, seminars and workshops for the entire BU Fraternity (students, research scholars, faculty and staff members).

We invite the entire BU Fraternity for active participation during LibQuest '20 and make it memorable.

You asked; We listened...

Registration Details coming Soon! Stay in touch

Reading should not be presented to children as a chore, a duty. It should be offered as a gift —Kate DiCamillo

Covid-19 Lockdown Crises: Response by the Learning Resource Centre (Library) at Bennett University

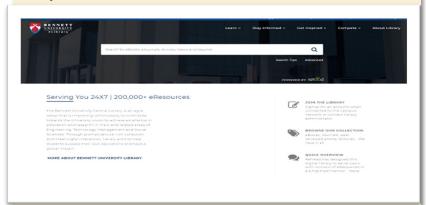
The impact of this prolonged pause due to Covid-19 may be profound among our children resulting in a quiet brain drain. The crisis has encouraged the Education systems across the world to take bold decisions in democratizing learning, taking classrooms to every household through e-learning.

Learning Resource Centre at Bennett University has also initiated the implementation of open access resources (OERs) for the entire Fraternity including students, scholars and faculty members at this time of crisis.

More than 3 Lacs e-resources (e-books, e-journals, and databases) and other open education resources are made available and accessible remotely through the LRC at Bennett University. The entire Bennett Fraternity can access these e-resources from anywhere 24x7 via Refread Digital Library (remote access platform).

A video tutorial has been created and uploaded on the LRC website to provide guidance on "How to access e-resources" for those who are remotely using Refread Digital Library platform.

Online training programs on providing guidance on accessing these e-resources are being conducted by the librarian on regular basis for faculty members and students. For more information, visit



https://bennett.refread.com/#/home

Open Educational Resources (OERs): List of OERs offered by the LRC at Bennett University is an exhaustive collection of initiatives, mostly by the MHRD, Government of India. The compilation comprises OER initiative by Publishers with high impact factors including Oxford, Springer, Taylor & Francis, Cambridge and many others. For more information, visit

https://library.bennett.edu.in/research-support/open-access-resources/

<u>Pearson Education</u>: LRC team is communicating with globally well-known publishers like Pearson Education, Springer, Taylor and Francis, Cambridge etc., for initiating trial/free access of etextbooks. Our faculty members and students are using these books for their teaching and research purposes on a regular basis.

National Program on Technology Enhanced Learning (NPTEL): an initiative by several IITs of India along with IIS, Bengaluru. It is the largest online repository in the world catering to engineering, basic sciences, selected humanities and social sciences subjects. To explore more, visit

https://onlinecourses.nptel.ac.in/explorer

Study Webs of Active-learning for Young Aspiring Minds (SWAYAM): It's a Government of India initiative designed to achieve access, equity and quality education, from class 9 to postgraduation.

Courses available in SWAYAM are in 4 quadrants including video lectures, reading materials that can be downloaded/printed, self-assessment tests through tests and quizzes and online discussion forum for clearing the doubts. To explore more, visit http://swayam.gov.in

Virtual Labs: an initiative of the MHRD under the National Mission on Education through ICT with an aim to provide remote-access to Labs in various disciplines of Science and Engineering. Under Virtual Labs project, over 100 Virtual Labs consisting of approximately 700+ web-enabled experiments were designed for remote-operation and viewing.

To explore more, visit http://www.vlab.co.in

National Digital Library of India (NDL)- This repository: comprises of educational materials ranging from primary to post-graduate levels. It consists both technical and nontechnical content including management and law in more than. To explore more, visit https://ndl.iitkgp.ac.in/

For an uninterrupted learning experience, please visit LRC website at Open Access Resources

LRC Events



A one-day workshop on *Mendeley: A Reference Management Tool & Research Matrix* was organized by the Learning Resource Centre on 17 January 2020.

The workshop was conducted by **Dr. Vijaya Kumar Mallappa**, a Mendeley Advisor and Librarian at Central University, Rajasthan. The objective of the workshop was to provide a hands-on training to the authors, researchers and Library Staffs on Mendeley: A Reference Management Tool and insights on various Research Matrices that are relevant/useful to authors for making publishing decisions.

A one-day workshop on **Research Ethics in Publications** was organized by the **Learning Resource Centre** on **7 February 2020**. The workshop was conducted by **Dr. G. Mahesh**, Senior Principal Scientist at the CSIR-National Institute of Science Communication and Information Resources (NISCAIR). The workshop topics had been designed taking into consideration the mandates by UGC and the research needs. Participants included research scholars, faculty members and library professionals.





Dr. Sanjay Kataria delivered a keynote talk on *Innovative Library Services* during an International Conference on Digital Technologies and Transformation in Academic Libraries (DigiTTAL-2019) organised by Central Library National Institute of Technology Karnataka, Surathkal, held on December 28, 2019.

Dr. Sanjay Kataria was invited for consultation of library modernisation at Bhopal in Barkatullah University, and also delivered a lecture on Research ethics and copyright Law during February 10-11, 2020.



Dr. Sanjay Kataria served as Panelist during panel discussion on *ETD Lifecycle Management*, organised by IGNCA in collaboration with Author Café help on January 30, 2020 at IGNCA Conference Hall, CV Mess, Janpath, New Delhi.



A webinar on "Emerging Trends in Academic Libraries: Success Story of Bennett University Library," was presented by Dr. Sanjay Kataria, Librarian at Bennett University, Greater Noida (Times of India Group) on 21st April 2020 at 11:45 AM. Over 100 eminent library professionals and research scholars participated from various part of the country.



Think about participating in something new — venture, that sparks your motivation and curiosity.



LRC ADVISORY COMMITTEE

Prof R. S. Chauhan Dean, Research & Consultancy Professor & HOD - Biotech	Chairman
Dr. Palakh Jain Assistant Professor - SOM	Member
Ms. Bhumika Nanda Assistant Professor - SOL	Member
Dr. Manjeet Kumar Assistant Professor - SEAS	Member
Ms. Pallavi Bansal Assistant Professor - TSOM	Member
Dr. Nidhi Sinha Assistant Professor - HSS	Member
Mr. Manish Finance Controller	Member
Dr. Sanjay Kataria University Librarian	Member Secretary

WHAT'S NEW

The LRC is currently in the process of subscribing to a wide-ranging national and international databases / e-resources like **J-STOR**, and abstracting and indexing database, **SCOPUS**.

LRC TEAM

Dr. Sanjay Kataria, University Librarian

Mr. Jamil Ahmed, Assistant Librarian

Dr. Shiv Singh, Assistant Librarian

Ms. Tulika Dey, Content Writer / Jr. Professional Assistant

Mr. Tarun Kumar Singh, Jr. Professional Assistant

Library Trainees: Babita Kumari, Mr. Sandeep Kumar, Mr.

Anujesh Pratap Singh, Mr. Sachin Ambedkar

CONTACT US

Browse through our well defined <u>Tutorials</u>, <u>FAOs</u> or reach us in-person at the Ground Floor, Academic Block of the University.

Dr. Sanjay Kataria University Librarian

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sanjay.kataria@bennett.edu.in

LRC website: http://library.bennett.edu.in

DRS Website (Intranet): http://10.9.18.234:8081/jspui/

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