

CHAPTER XIX
PUBLICATIONS IN 1964-65

AERONAUTICAL ENGINEERING

Title	Authors	Journal
Aerodynamics of Wings and Bodies	Holt Ashley and Marten T. Landahl	Addison Wesley Publishing Co., Reading Mass., U.S.A. in early 1965
Some Recent Developments in Interference Theory for Aeronautical Applications	Holt Ashley	Polish Academy of Sciences in 1964
Machine Computation of Aerodynamics Load in Linear and Non-linear Situations	-10-	Proceeding of the Ninth Congress 20-24 Dec. 1964
A study of Ventilation Patterns induced by Vehicular Motion Through the Lincoln Tunnel	D. C. Hazen, E. Lehnert, F. Rudolf	Princeton Engineering School Technical Report
-Boundary Layer Control	D. C. Hazen	National Committee on Fluid Mechanics, December, 1964
Overheating of Turbine Blades on Sudden Loss of Vacuum	C. S. Moorthy	English Electric Co. Ltd. Eng- land, Feb. 1965
Evaluation of 3-Dimensional Performance of Last-Row	-do-	English Electric Co. Ltd. England, June 1965
CHEMICAL ENGINEERING		
Chemical Plant Fixed Capital Costs	C. E. Dryden	Chemical Age of India, Vol. 15(9), 985-990 (Sept. 1964)

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Calculation Methods for Complex Flow Diagrams	K.S. Gandhi, Suresh Chandra and C. E: Dryden	Chemical. Age of India, , 15(11), 1183-1199 (Nov. 191
CHEMISTRY		
Book--Ultraviolet and Visible Spectroscopy, Butterworth, London, Russian Translation	C. N. R. Rao	Mir Publishers, Moscow, 1964
Carbamoyl Azides	E. Lieber and C. N. R. Rao	Chem. Revs., 65 , 377 (1965)
Baker-Nathan Order in Donor-Acceptor Systems at Equilibrium	S. Singh, R. K. Gosavi and K. R. Bhaskar	Tetrahedron Letters, 2607 (1965)
Hydrogen Bonding in Aniline and Thiophenol	A. S. N. Murthy	Indian J. Chem., 3 , 143 (1965);
Chlorine-36 produced by neutron capture in Meteorites Cosmic-ray produced iron-60 in odessa meteorites	P.S.Goel -do-	Nature, 203, 1162 (1964) J. Geophys. Res.) 70 , 747
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Oxygen Analysis of Minerals and Oxides ~~~~~	T. Sharma and R. N. Clayton	Anal. Chem. 36,2007 , (1964)
Conformational equilibria in Bis (a-hydroxy naptialdimine) Ni (II) Chelates	A. Chakravorty and Inorg. Chern., 3 , 1010 (1964) R. H. Holm	

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A nuclear resonance investigation of mixed ligand complexes	A. Chakravorty and R.H. Holm	J. Am. Chem. Soc., 86 , 3999 (1964)
Identification of the geometrical isomer of some tris-chelate cobalt (II) complexes by nuclear resonance	-do-	Inorg. Chem., 3 , 1521 (1964)
Structural interconversions of octahedral, planar and tetrahedral Ni (II) complexes	A. Chakravorty, I. Fennessy and R. H. Holm	ibid, 5 , 26 (1965)
A case of anomalous isomorphism	A. Chakravorty	ibid, 5 , 12.1 (1965)
Thermodynamic Properties of High Temperature Aqueous Solution II Standard Partial Molal Heat Capacities of Sodium Perhenate and Perhenic acid from 0 to 100 ⁰	J. C. Ahluwalia and J. W. Cobble	J. Am. Chem. Soc., 86 , 5377 (1964)
Thermodynamic Properties of High Temperature Aqueous Solution III. The Partial Molal Heat Capacities of Hydrochloric acid from 0 to 100 ⁰ and the Third Law Potentials of the silver-silver Chloride and Calomel electrodes from 0 to 100 ⁰	J. C. Ahluwalia and J. W. Cobble	J. Am. Chem. Soc., 86 , 5381 (1964)
Thermodynamics of Ionization and Tautomerism of Aqueous Pyri- dine mono Carboxylic acids	Frank J. Millero, J. C. Ahluwalia and Loren G. Hepler	J. Phys. Chem. 68 , 3435 (1964)
Thermodynamics of Ionization of Aqueous Barbituric acid and substituted Barbituric acid	-do-	J. Chem. & Eng. Data, 10 , 199, (1965)
Analytical applications of solo chrome azurine B. S., New method for selective detection of copper	Uma Tandon, S. N. Tandon and S. S. Katiyar	Talanta, 12 , 639 (1965)

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Analog Computers in the Design of Machine Foundations	M. Anandakrishnan	Indian National Society of Soil Mechanics and Foundation Engineering March 1965
Finite Asymmetric Deformation of Shallow Spherical Shells	R. R. Archer with J. Famili	AIAA Journal Vol. 3 No.3 March 1965 p 506-510
On the Orthogonality Condition of Asymmetric Vibration Modes for Shells of Revolution	R. R. Archer with F. K. Bogner	Journal Appl. Mech. AS ME Vol. 32 No. 2 June 1965 p 447-48
On the vibration and Stability of Finitely Deformed Shallow Spherical Shells	R. R. Archer with J. Famili	Jour. Appl. Mech. ASME Vol. 32 No.1 March 1965 p. 116120
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Direct Series Methods for the Vibration Analysis of Spherical Shells	R. R. Archer with J. Tomko	Report NSF Grant GP-938 Case Inst. of Tech. Sept. 1964

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Vibrations of Orthotropic Cylindrical Shells	Y. C. Das	Applied Scientific Research Section A, Vol. 12, 1964 pp 317-326
Carry-over and Stiffness Factors of a Continuous Two-way Slab as an Orthotropic Plate	P. Dayaratnam	Journal of Institution of Engineers (India) July, 1965
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Role of Electronic Computers in the Solution of Survey Problems	K. K. Rampal	Proceedings of All India Seminar on Surveying held in Vigyan Bhawan, New Delhi from 9th April to 12th April 1965.
Physical Tables in M. K. S. (System)	-do-	New Light Publishers, New Delhi-1965
ELECTRICAL ENGINEERING		
A High-Speed Tunnel Diode Counter	Prof. A. D. Booth & T. R. Viswanathan	The Radio and Electronic Engineer-Journal of I. E. R. E., Vol. 29, NO.4 April (1965)
HUMANITIES AND SOCIAL SCIENCES		
Some reflections on the Philosophical study of meaning	Dr. R. Prasad	Visva Bharti University Vol. 1-1964 pp. 17-24
Reason and Sentiment: A Dialogue	-do-	Darshan International Vol. IV 1964pp.13-25

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Religious Belief	Dr. R. Prasad	Philosophical Quarterly Vol. XXXVII 65 pp. 209-219
Whither Indian Philosophy	-do-	Darshanika Vol. X Oct. 64 pp. 266-80
Intervening Neutral Activity in visual Perception. A Hypothetical construct	Mr. O. P. Tayal	Journal of Gen. Psych. 1965, 72, 199-219
Time Intensity Relation for Absolute Limen in visual perception	-do-	Indian Psych. Review 1965 Vol. 2, No.1, 41-46
Mai Aur Anya	Mr. R. S. Misra	Darshanik Traimasik Year 10, Ank 3, July 1964 p. 152
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On the unsteady flow of two incompressible immiscible fluids between two plates	J. N. Kapur with J. B. Shukla	ZAMM, XLIV 268-269, 1964
Similar solutions of boundary layer equations for two dimensional flows of a certain class of non-Newtonian fluids	J. N. Kapur with V. P. Tyagi	ZAMM, XLIV, 137-139, 1964
La methode de charge equivalente dans la theorie generale des charges composites	J. N. Kapur with B. S. Jain	Mem. Art., Frans. XXXVII, 1011,-1032, 1963
On the construction of three dimensional solutions of equations of fluid dynamics from two dimensional solutions by using the principle of superposibility	J. N. Kapur with B. L. Bhatia	Ganita XIV, 67-78, 1963
Form-function and variation of burning surface area from the pen- tatubular charge	J. N. Kapur with V. K. Srivastava	Def. Sci. Journ. Ind. XIV, 71-90, 1964
Form-function and variation of burning surface area for eccentric cylindrical charge	J. N. Kapur with V. K. Srivastava	Def. Sci. Journ. Ind. XIV, 91-98, 1964
Two-dimensional flow of 'power law fluids in the inlet length of a straight channel-II	J. N. Kapur with R. C. Gupta	ZAMM, 44, 277-284, 1964
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~m-function and variation of burning surface area for hexatubular charges	J. N. Kapur with V. K.	Def. Sci. Journ. Ind. Vol. 14, No.4, p. 303-310, 1964
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Elliptic inclusion in orthotropic medium

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Dual Series Relations-I, Dual Relations involving Fourier-Bessel Series

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Dual Series Relations-II, Dual Relations involving Dini Series

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Dual Series Relations-III, Dual Relations involving trigonometric series

-do-

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Flow between two-axial cones under a radial force with suction and injection	-do-	The Mathematics Seminar, India, Vol. III, No.3, p. 671680, 1963 Archiwum Mechaniki Stosowanj, 4, 16, 1964
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The flow of incompressible immiscible fluids between two plates	J. B. Shukla	App. Sei. Res., Sec. A Vol. 13, 1964
Flow of a power law fluid through a slot	R. C. Srivastava with J. N. Kapur	J. Phys. Soc. Japan, Vol. 19, p. 1085, 1964
Similar solutions of boundary layer equations for power law fluids	R. C. Srivastava	A. I. Ch. E. Journ. Vol. 10, No. 5 p. 775 Sept. 1964
Hydrodynamic Lubrication of an externally pressurised bearing using a Reiner-Rivlin lubricant		App. Sc. Res. Sec. A Vol. 13, p. 888-892, 1964
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Flow of Reiner-Rivlin fluids in the inlet region of a channel.	R. C. Gupta with J. N. Kapur	J. Phys. Soc. Japan, 19,386-392, 1964
Two dimensional flow of power law fluids in the inlet length of a straight channel II	-do-	ZAMM, 44, 277-284, 1964
Power law fluid flow in the inlet length of a circular pipe	-do-	The Mathematics Seminar 3, 55- 67, 1963
A note on pressure distribution for hypersonic boundary layer flow	M. S. Sastry	A.L.A.A. May 1964
Queues with Batch Poisson Arrivals and-general class of service time distributions	S. K. Gupta	J. of Industrial Engineering, America, Vol. XV, No.6, Nov. Dec. 1964 p. 319-320
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MECHANICAL ENGINEERING

"Self-excited Vibrations of Turbomachine Blading".

"Hybrid Bearing"

METALLURGICAL ENGINEERING

Low temperature specific Heat of B.C.C. Solid Soln. alloys of Fe with Si, Ge, Sn.

Low temperature specific Heat of B.C.C. alloys of 3d Transition elements and Al.

Low Temperature specific heats of Fe-Al alloys

Order-disorder and ionic conductivity in cubic ZrO₂-CaO

PHYSICS

³He⁺ reaction on C¹³

P. A. Paranjpe

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'Effect of Impurities on Magnetization of Ferromagnets at low temperatures'	P. Vashishta & J. Mahanty	Proc. Phys. Soc. (London) 84, 309 (1964)
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