

Seminar to be given in [Department of Physics, University of Karachi](#) as part of MPhil/PhD course on *Research Methodology* (Venue: Smart Conference Room, Department of Physics • Date and Time: to be announced) — recorded presentation to be placed on speaker's [homepage](#) after delivery of seminar ([link available](#) • [link not available at present](#))



Publishing Research Papers as Part of the Requirement of Submission of PhD Dissertation

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Publishing papers in top-ranking journals is important for a young researcher pursuing MPhil/PhD in Physics. Current ASRB^V, University of Karachi regulations require publication of one 'W' category or 2 'X' category papers, title of one such paper should be identical to title of PhD synopsis (PhD candidate should either be the first author or the corresponding author). Quality journals are indexed in recognized indexing agencies (Scopus, Web-of-Science). These journals have high Clarivate Analytics Impact Factor (only this one recognized by Higher Education Commission, Government of Pakistan), evolved from ISI and Thomson Reuters. Avoid publishing in predator journals (fraud refereeing process, questionable editorial board), sometimes indexed by predator indexing agencies. Authors' rankings are at times determined by their *h*-indices and *i10*-indices. Main reasons of failure to publish in prestigious journals include lack of training in of experimenting strategy, incorrect decisions based on insufficient data, bad engineering decisions by setting vague project objectives, inappropriate statistics know-how — surveys conducted without calculation of sample size (based on the level of confidence selected, identification of variables of interest and study of variable interactions) and checking consistency of responses through principal-component analysis. Survey questions should both positive and negative statements (not clustered together) and response distribution, based on 5-point-Likert scale, must be mirror of each other. While reporting a scientific study, ORCID number of authors, descriptive statistics (qualitative and quantitative), experimental setup, experimental conditions, strengths and

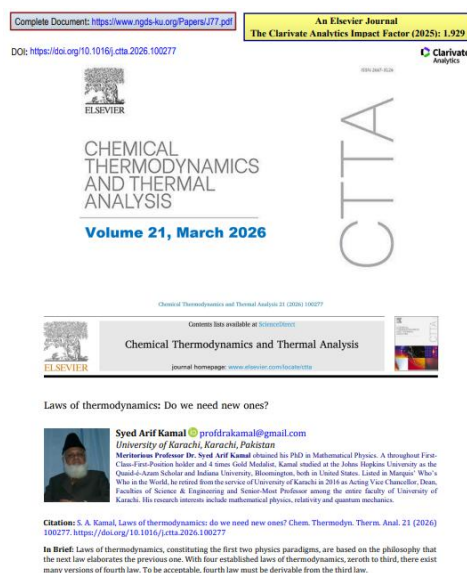


Fig. 1. Recent publication of short communication of speaker in *Chemical Thermodynamics & Thermal Analysis* (Elsevier): Clarivate Analytics Impact Factor (2025): 1.929

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Kamal, S. A., H. I. Azeemi and S. R. Khan (2017b). Psychological testing, physical examination and fitness testing of primary-school students for participation in gymnastic activities. <i>Pakistan Journal of Sport Sciences</i> , 8 (2): 15-40 — Table 4 connects Tanner scores with prepubertal, pubertal, adolescent and adult stages of puberty. full text: https://www.ngds-ku.org/Papers/148.pdf	Existing knowledge — already known on this topic Childhood obesity is a prime concern for global health, obesity is a complicated condition, which is influenced by interactions between environmental and genetic factors. The true prevalence of childhood obesity difficult to quantify as there is no universally accepted definition available at present. BMI still the most popular index for classifying wasting and obesity. Various definitions of obesity proposed include cut-off point of adult BMI as 30 kg/m ² , BMI ranges in childhood.
Kamal, S. A., M. J. Ansari, S. A. Anwar and A. Naz (2020). Two-parameter (height and mass) problem solved by fitting parabolic curve to construct Growth-and-Obesity Vectors-Roadmap 3.0 — the eighth-generation solution of childhood obesity. <i>International Journal of Biology and Biotechnology</i> , 17 (1): 23-37. full text: https://www.ngds-ku.org/Papers/154.pdf	Existing scenario — the NGDS Team (our group) contributions 2004 Height percentile-based-optimal mass (name mention as 'optimal mass', formal definition in 2015) 2011 Statuses (pertaining to height) and (pertaining to mass); only 'obese' and 'wasted' used with percentage indicators; severely instead of overweight, fat, underweight, lean 2012 Estimated-adult BMI, model extended to still-growing parents 2013-2020 1 st to 9 th -generation solutions of childhood obesity
Kamal, S. A., N. Jamil and S. A. Khan (2011). Growth-and-Obesity Profiles of children of Karachi using non-interpolation method. <i>International Journal of Biology and Biotechnology</i> , 8 (1): 87-96. full text: https://www.ngds-ku.org/Papers/129.pdf	2014 Energy-channelization I-II, pseudo-gain of mass/height; use of percentile trajectories of height/mass instead of growth (height) velocity; rate of mass gain/loss, CDC Growth Tables extended to include percentiles in the range 0.01 st to 99.99 th (to handle extreme cases) 2015 Month-wise targets (next 6 months) to shed-off-fat on mass and pick-up height; mathematical definition of 'built', formula to compute severity of acute malnutrition 2016 Mass and height measurements to least counts of 0.05 kg and 0.005 cm, respectively, accompanied by manual, version 9.11
Kamal, S. A., S. A. Ansari, M. Sarwar and A. A. Naz (2017c). Medical criteria for induction into the Armed Forces of Pakistan: cut-off heights for still-growing youth. <i>International Journal of Biology and Biotechnology</i> , 14 (3): 319-331. full text: https://www.ngds-ku.org/Papers/147.pdf	2017 Definitions of childhood obesity and BMI-based-optimal mass; mathematical criteria to classify normal, early, delayed and precocious puberty through scaled percentiles; assignment of Tanner scores to prepubertal, pubertal, adolescent and adult stages 2018 Integration of height percentile-based-optimal mass with BMI-based-optimal mass to modify definitions of statuses (pertaining to height) and (pertaining to mass); polar-coordinate representation of nutritional status; fractional status (pertaining to height and mass) 2020 Introduction of specific BMI, height-gain-target-achievement index and mass-gain-target-achievement index
Kamal, S. A., S. A. Ansari and S. S. Jamil (2015). Generating and validating Growth-and-Obesity Roadmaps for the Pakistani children. <i>International Journal of Biology and Biotechnology</i> , 12 (1): 47-61. full text: https://www.ngds-ku.org/Papers/135.pdf	This work adds Reference height defined as the maximum of target height, adult-amy-cut-off height and adult-median height (corresponding to 40 th) Nutritional status categories enhanced to 23; new categories introduced — true over-nutrition, true under-nutrition and true energy-channelization and it's complex status — real part (mass) + imaginary part (height) Proposed scenario — the next step Four mathematical equations to convert CDC percentiles to modified scaled percentiles generated from rigorously-collected anthropometric data
Kamal, S. A. and S. A. Khan (2018). Overcoming vitamin-D deficiency in male gymnasts during preteen years. <i>The Slip (International Journal of Physical Education, Health, Sports and Allied Sciences)</i> , 2: 60-75. full text: https://www.ngds-ku.org/Papers/150.pdf	

Fig. 2. Existing knowledge, existing scenario, value addition from the current work and the next step presented in one column

national Biography'. The speaker has 77 papers in peer-reviewed journals to his credit, some of which published in *Anthropological Notebooks*, *Biological Cybernetics* (Springer Nature), *Chemical Thermodynamics & Thermal Analysis* (Elsevier), *Chinese Journal of Physics* (Elsevier) and *Journal of Biological Physics* (Springer Nature) as well as 172 conference presentations, some of which published in *IEEE Proceedings*. He is a referee of international journals, *Acta Paediatrica* (Wiley), *Chemical Thermodynamics & Thermal Analysis* (Elsevier), *Clinical Biomechanics* (Elsevier) and *Optics & Laser Technology* (Elsevier) as well as national journals *Pakistan Journal of Scientific and Industrial Research* and *Proceedings of the Pakistan Academy of Sciences*. He serves on the editorial board of *Bozok International Journal of Sport Sciences* as well as advisory boards of *FUUAST Journal of Biology*, *the Shield* and *the Sky*. He has given 79 colloquia, guest lectures and seminars, conference chair/co-chair in 5 conferences, chief guest in 6, presided 4, keynote speaker in 10, invited speaker in 12 and panelist (panel discussion) in 3 conferences. Further, he has delivered 16 memorial lectures, conducted 24 trainings, workshops and professional development short courses as well as organized 17 exhibitions, grand seminars, seminar series and conferences. 7 students have completed their PhDs and 6 MPhils under his supervision and guidance. As Dean, Faculty of Science, University of Karachi, he had the opportunity to scrutinize synopses of MPhil/PhD candidates as well as preside dissertation defense of PhD candidates of the entire faculty.

Keywords: Clarivate Analytics • *h*-index and *i10*-index • Impact-factor calculation • ISI (Institute of Scientific Information) • Predator-indexing agencies • Predatory journals • Scopus • Thomson Reuters • Web-of-Science [Presentation Slides PDF](#)

^U100% marks in all subjects during the final semester

^VAdvanced Studies and Research Board, previously called BASR (Board of Advanced Studies and Research)

^OHighest Security Clearance by virtue of speaker's appointment as Senior Scientific Officer (Group IX), Control-Systems Laboratories and consultancy for Guidance, Navigation and Control Laboratories, SUPARCO (Plant)

Main reference: **Publishing Research Papers in Prestigious Peer-Reviewed Journals**

KAMAL SA, *Proceedings of the Seventh International Conference on Innovative Academic Studies (ICIAS 2025)*, September 2, 3, 2025, edited by All Sciences Academy, Konya, Türkiye, pp 550-557, paper#Y-73, p 69, abstract#136: <https://www.ngds-ku.org/Presentations/ICIAS25.pdf>

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