



UNIVERSITI PUTRA MALAYSIA

AGRICULTURE • INNOVATION • LIFE

TALK SERIES 3, RMC, IIUM

Be an outstanding researcher – Reality or fantasy

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Google Scholar

Citations 37051
h-index 101

2 November 2022

Scopus®

23319
Citations by 11889 documents

79
h-index: [View h-graph](#)



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Presentation Outlines

1 Introduction

2 Proposed approaches

3 Qualities of good researchers

4 Sharing experience

5 Conclusions



Introduction

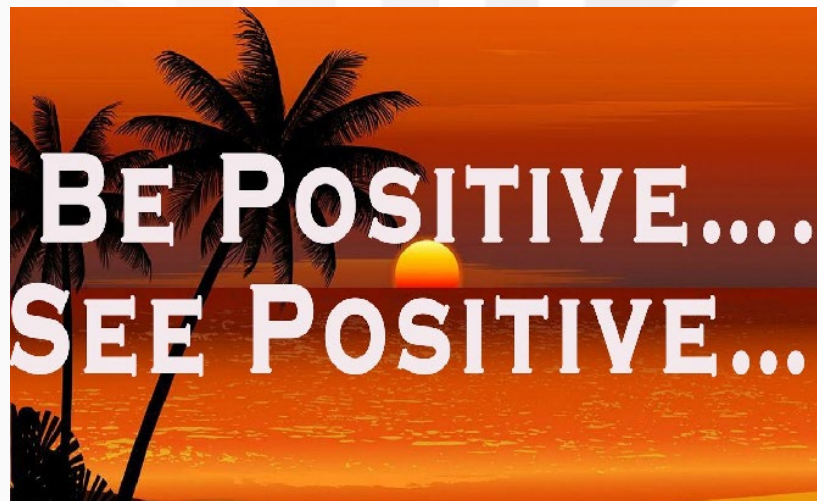
Competitive academic environments - attached to academic rankings, publication numbers and research grant values.

The importance of online indicators of scholarly productivity (e.g. h-index, citations, impact factors).



Our responsibility

- It is important to create and maintain positive and realistic perspective on academic career.
- So career is under control, productive and able to fulfil relationships with colleagues.





Research



Sharp et al. (2002) defines research as:

“...seeking through methodical processes to add to one’s own body of knowledge and to that of others, by the discovery of nontrivial facts and insights”.

Sharp, J.A., Peters, J. and Howard, K. (2002), The Management of a Student Research Project, Third Edition, Gower Publishing Limited, Aldershot, Hants.



It is important

- Publish in journals of high repute with frequently cited collaborators
- Gain experience of applying and securing research funding
- Demonstrate research project management which delivers outputs on time and within budget
- Understand the process of quality assessment in research

Highly Cited Researchers

Ranking in the top 1% by citations for field and publication year in Web of Science, Highly Cited Researchers are leading the way in solving the world's biggest challenges.

It is important



- Be conversant with current issues in higher education concerning research
- Networking with people who are aware of our research activities and can advise on research strategy
- Using conferences to raise profile within the discipline and as a platform for publications
- Analysing selection criteria of academic excellence and providing evidence that meet the standards.

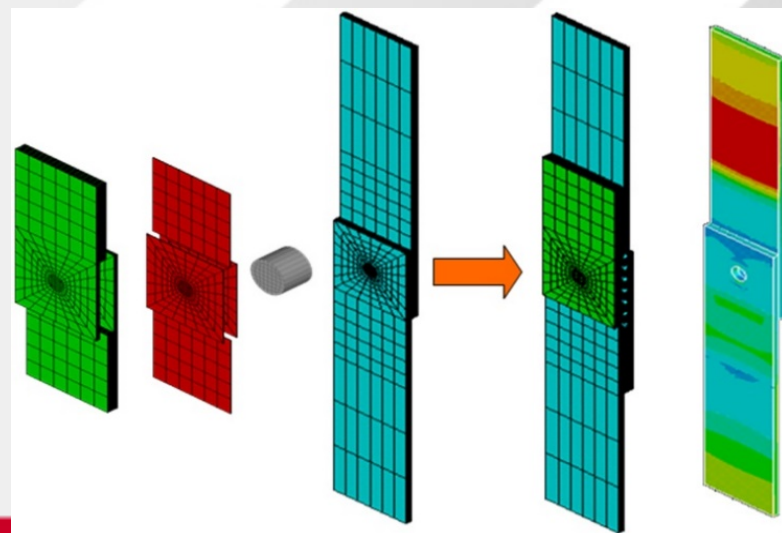
Approaches

- Select research commitment carefully – do not serve too many committee
- Maintain balance in academic roles – teaching, research and service, and meet the requirements
- Create research plan
- Apply research project
- Use mentor and peer for support
- Collaboration



Understand the context

- What is our research field and areas of interests?
- What do we want to be in next 5 years time?
- Who are likely to be our research and publishing colleagues?



Further approaches

- Determine how strongly you want to be researcher?
- Do not feel discriminated because you are young, new etc.
- Know yourself – your strength
- Choose your own research direction





Further approaches (cont.)

- Build systems to reinforce your strengths and overcome your deficiencies.
- Set specific achievement targets
- Manage your times
- Recognize the opportunities in academic life
- Support colleagues in their endeavour, mentor & inspire them





UPM Make an early impact

- Early years of academic career is critical for next 5 - 10 postdoctoral years - important to be established and focused.
- Establish associations with colleagues, and show to existing and future colleagues the diligence and productivity.
- This leads to invitation to present conferences, review papers, supervise theses and join research teams.



Early Impact

Focus on strength

- We may have diverse interests, due to capacity to see wonder in everything.
- But, career is more successful if we specialize and get known for particular capabilities.

Specialization *In Medicine*



Get mentors and support

- Successful academic, early in careers, look for mentors from his department and outside.
- Having good advice – and paying attention to it – is important in academic career.
- Good guidance and support:
 - help the success of early career researchers*
 - support more productive research and networking*
 - help in stress management*





- [illegible]

Characteristics of a good researcher (cont.)

- Open minded
- Honesty
- Creativity
- Time conscious
- Quick thinker
- Curiosity
- Open to criticism
- Love to the profession





Secure funding

- As university budgets are limited, lecturers are required to secure research funding on their own.
- Even now granting bodies themselves face limited budgets.
- Information online and through RMC to find research funds and how to apply.





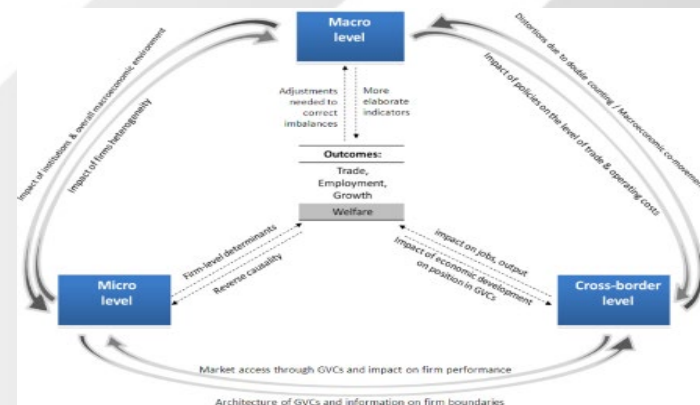
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Research and funding



Research grants

- Priority for granting organisation – aims of research consistent with their interests.
- Quality of proposal — originality, significance of expected results, strength in documentation.
- Calibre of researcher/ team — research record, qualifications, success story.
- Outcomes — likelihood of successful conclusion.

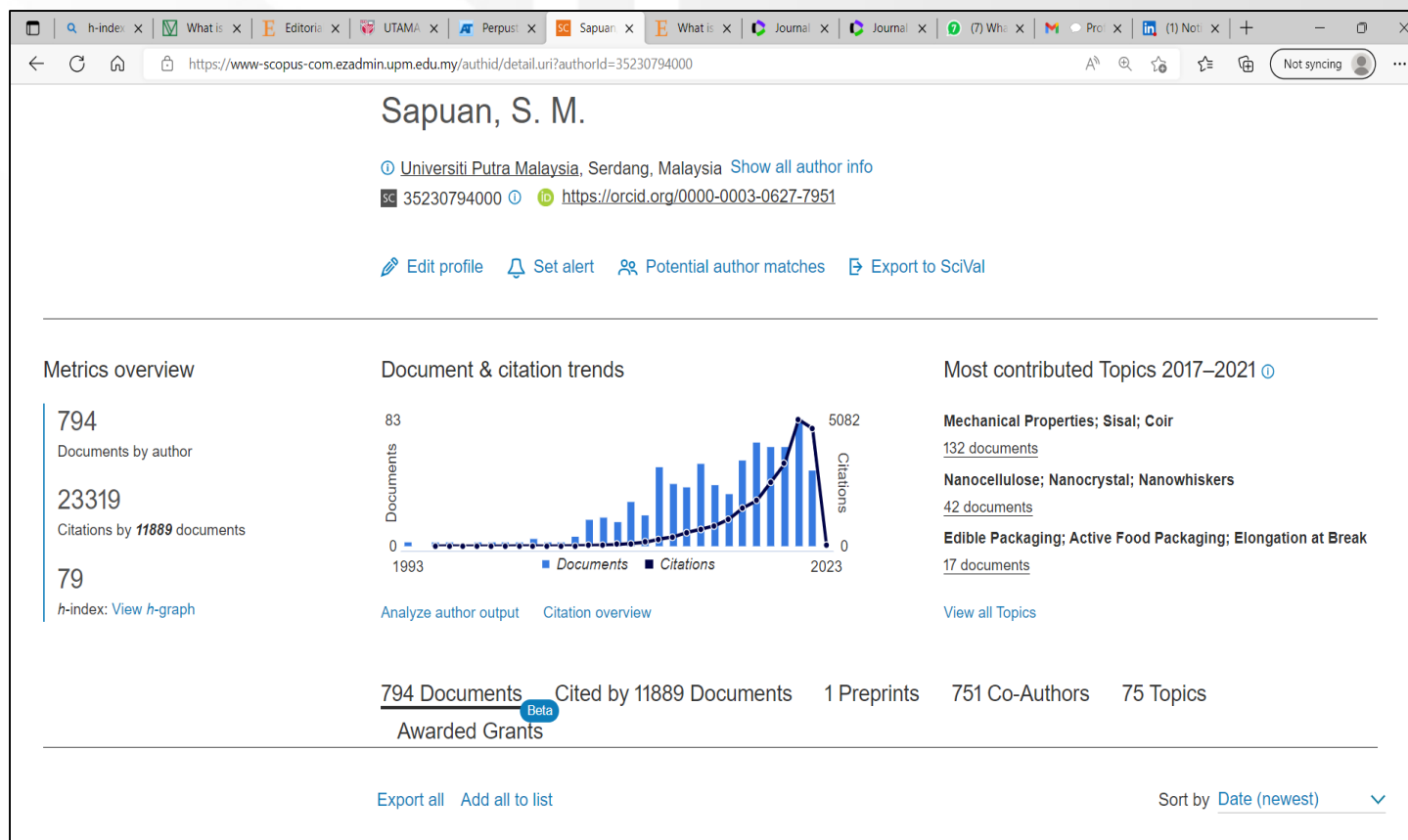


Impact of research

- Academic impact - the contribution that research makes within the academy (e.g. H-index, citations)
- Economic and societal impact - Contribution of excellent research to society and economy.



Academic impact





Examples social/economic of impact

- Creation and sharing of new knowledge and innovation
- Invention of ground-breaking products
- Companies and jobs
- Utilization of agricultural wastes: Wastes to wealth
- Enhancement of quality of life and health.



Social/economic of impact

- Economic and societal impact provides accountability for spending of public money;
- It improves quality of research because it enables engagement with beneficiaries.





Research facilities

- Research infrastructure, facilities and equipment
- In house facility
- Sharing through collaboration
- Need funding to pay for the services



Get known and networked

- Need to promote research to colleagues and community.
- Vital part of research development and dissemination process.
- Others to know and benefit from it.
- Promotion of work is important for career development.
- Visibility
- Discoverability



Learn about local cultures and use the system



- Most departments, faculties and universities have cultural norms that guide behaviour of members.
- These have been produced and reproduced by academics over many years and important in setting local tone for behaviour and 'productivity' standards.
- Some departments may have long tradition of serving relevant professional societies.



Perform well at job promotion interviews



- Early academic promotion
- Promotion to senior lecturer/associate professor/professor/a personal chair/distinguished professor



Manage your career

A lot of work to be done daily

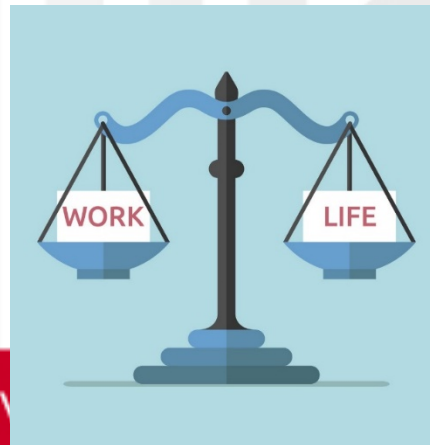
- Improve teaching or better engage with students
- Extra paper to write
- Additional committee work
- Extra administrative tasks



At least three ways of responding



- First, do less, less, less; farewelling academic career.
- Second, do everything; publication, reading, consulting, committee meetings, community service, foregoing life like exercise, and family.
- Third, develop plans that acknowledge variability of life and academic work and that satisfy long and short term careers, and personal ambitions.



Research leadership

- As your career develops, you will be offered research administrative roles that demand leadership and management skills.
- These roles starts with research coordinator, or research seminar series coordinator.
- Such positions are difficult to avoid but use them for achieving research leadership.
- Appointed Head of research group
- Head of research centre
- Deputy Dean Research
- Director of research institute
- DVC Research
- Leading big group of projects, committee
- Chairing conferences



Manage your time



- After planning overall direction of coming years, to be successful academic is to plan week and days.
- As long as we write the book, get the grant, submit the article or teach the class, where and how we get this work done is up to us.
- Time management is vital to satisfy research demands and to maintain work–life balance of research and academic work.
- No one tells lecturers when they are done or what is too much.





Attract postgraduate students

- Student supervision is measure of productivity and success
- Universities use completed MSc and PhDs as KPI of research achievement and promotion.
- Important to supervise MSc, and PhD students and postdoc.
- Helps in writing papers and developing research products.
- Work with team or research group.
- Start with MSc students.
- Start as a co-supervisor.



Join or start a research team

- Research teams take many forms, depending on purpose, funding, role and location and with diverse background.
- They have in common an identity as 'group of people working together in committed way towards common research goal
- Building research niche/moulding the field
- Launching research programme/leading research team
- Work collectively not individually.





RESEARCH COLLABORATION AND NETWORKING

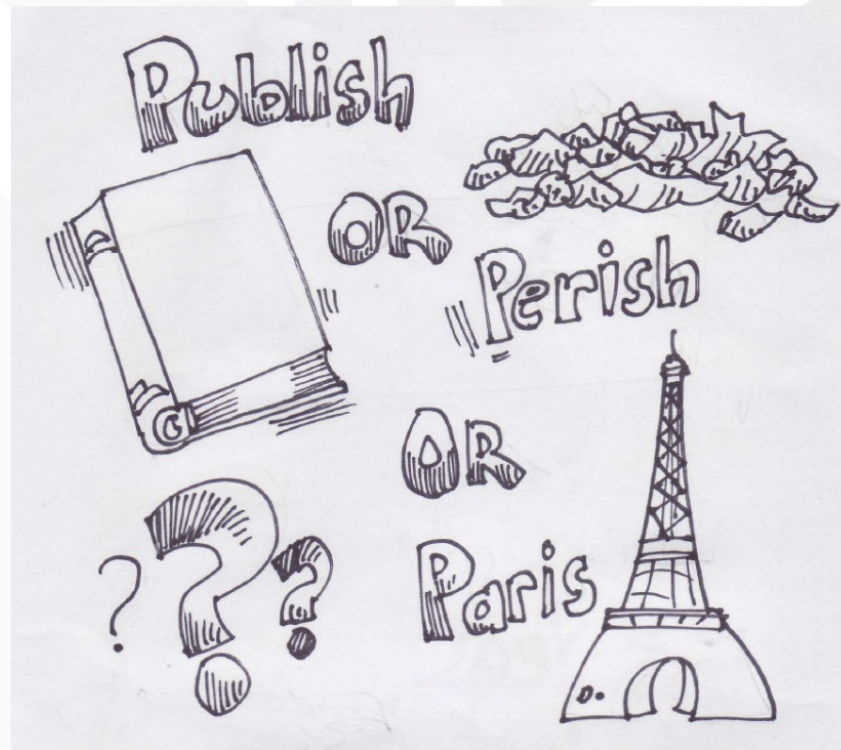
- Better research results can be achieved when more thoughts are being put into the topic studied as compared to individual effort.
- Small, focus conference is a good platform to nurture research collaboration.
- The major problems with research collaboration are on the authorship of the research publication and ownership of the research findings.
- Collaboration encourages fast execution of a research task.





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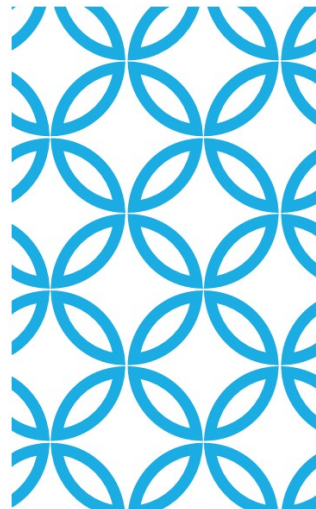
Publish and flourish





Publishing research

“...publishing research means that others can see tangible evidence of the effort and intelligence put into the work”.



RESEARCH
PUBLISHING



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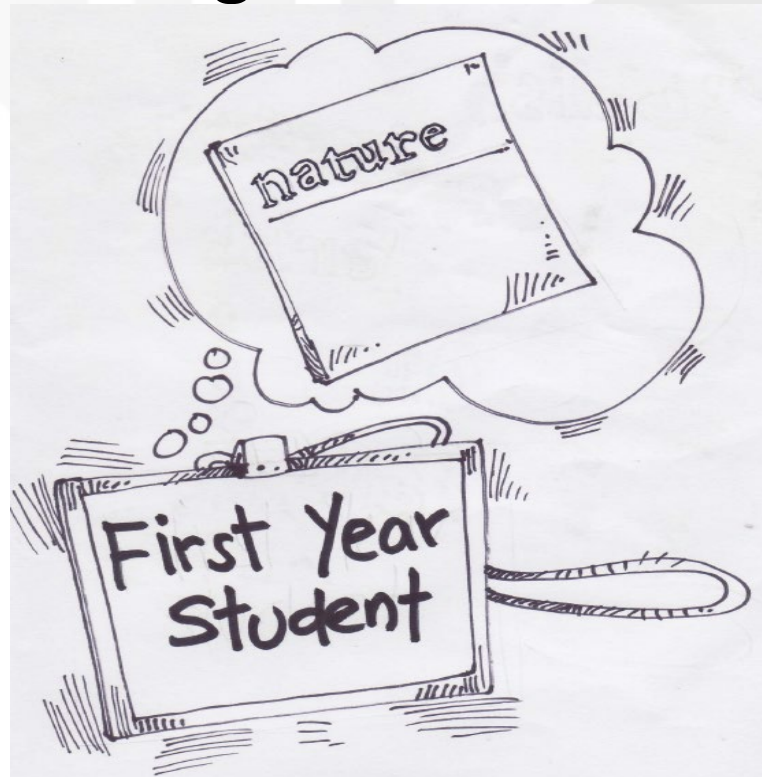
Research and publication

- Major consideration in research is contribution to knowledge
- Quality papers are means to gauge knowledge



Journal paper publication

- Publishing in high-profile journals with reputable publishing houses



Journal publication

There are approximately 30,000 active journals are being published worldwide.

Mere writing is not good enough but the main thing is whether the knowledge has some element the novelty.

Papers published in journals should have the following attributes:

- research based
- original work
- scholarly work
- high quality



Research questions

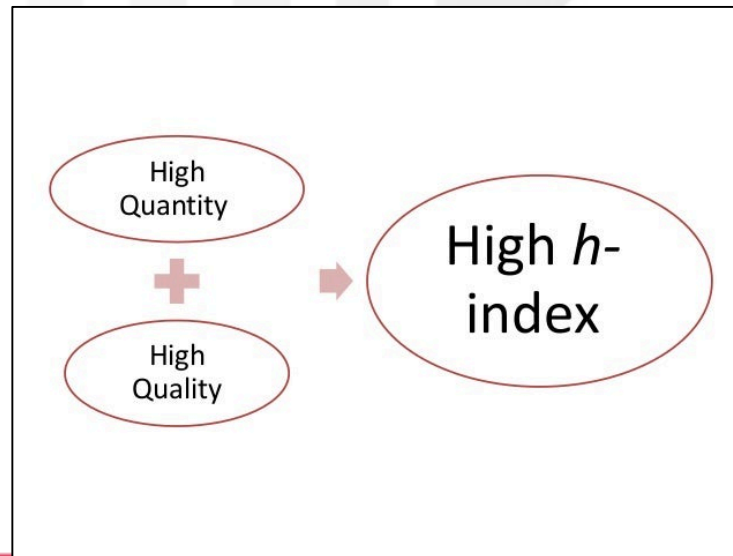
- Research question is starting point of any research.
- The unknown researchers to give answer.
- This questions are different depending on professional experience.
- Ask ourselves the research question to solve, which must meet criteria.



**RESEARCH
QUESTION**

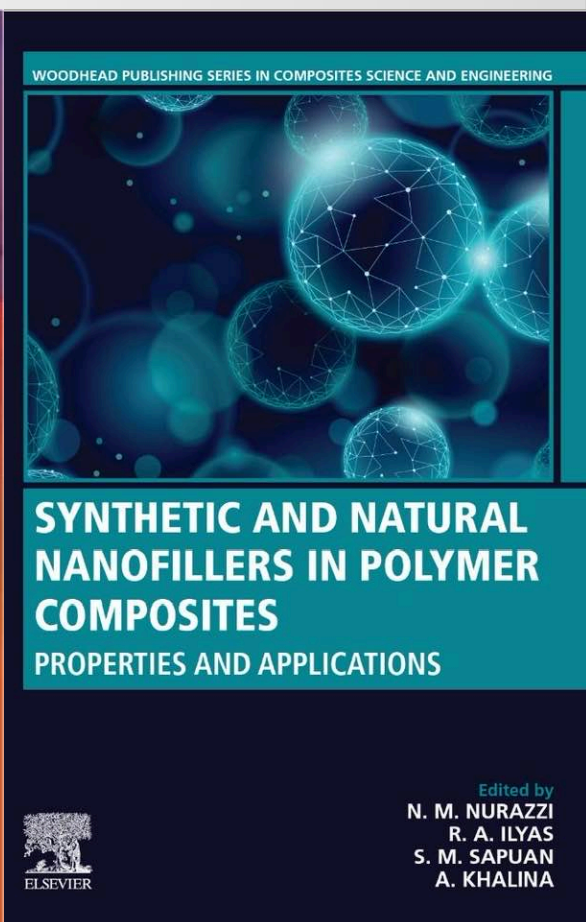
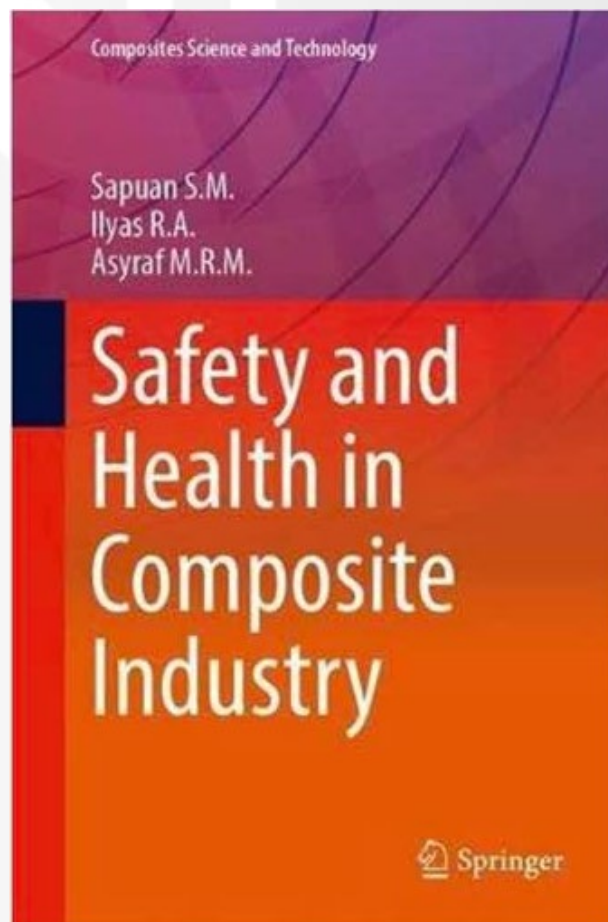
H index

- H-index is measure of life-time achievement.
- H-index is the highest number h for which holds that an author has h publications that are cited h times or more.
- H-index cannot fall over time and tends to increase.
- Ranking based on H-index favours with longer career.



Book writing

- Authored book
- Edited book
- Textbook
- Research book

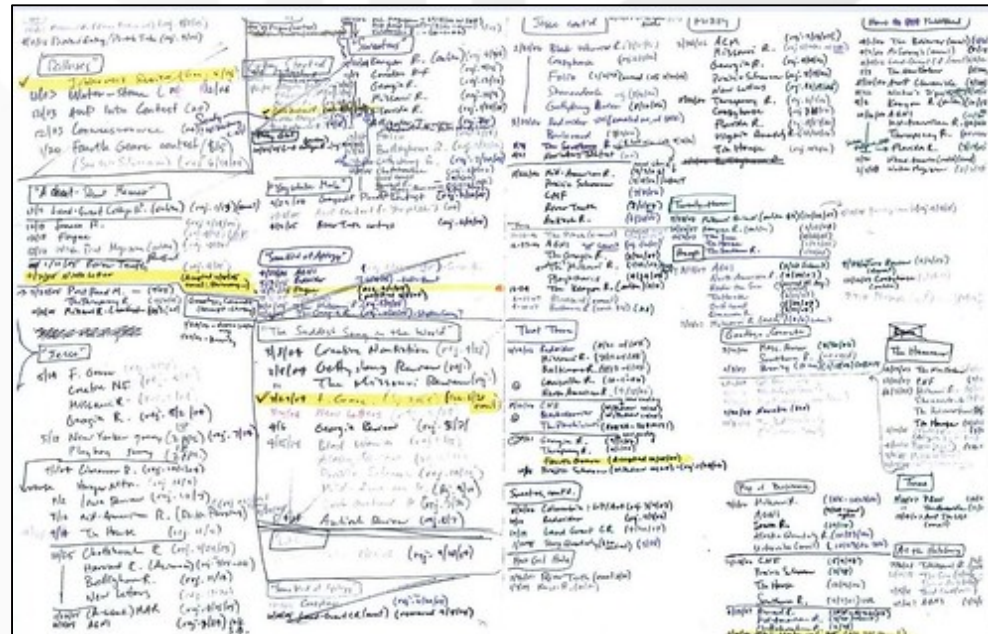




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Publication record

Future excellence is predicted on basis of information from researcher's past publication record.



Patents and other IPR

- Patents
- Copyrights
- Trademarks
- Commercialization
- Product development
- Product showcase
- Licencing



Teach well

- Teaching well is key measure of academic success.
- Challenging and rewarding experiences for academics.
- Delivering good lecture to 300 first-year students is uplifting.
- But flop in front of the same group can really ruin your day!
- To teach in one's specialty area.
- Bring research into classroom.



Find a voluntary roles

- Some lecturers reject volunteering in career, - 'need to get publications out' or they 'don't have enough time'.
- For early-career academic these may have merit, but volunteering cannot be dismissed for career success.





Voluntary roles

Volunteering provide relief from teaching and research and service to communities and opening up other opportunities.

Volunteering is contributor to success - paths to satisfaction and contributions to society.



Industrial and community engagement



- Consultancy
- Research contract
- Contribution to society
- Making contribution to knowledge
- Influencing people's behaviour or thinking
- Connecting with community through community project





Professional services

- Committee membership
- Membership and fellowship and active participation
- Reviewer of journal papers, research grant proposal
- Judge/Jury for exhibition/competition
- Editorial board for journals



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Get recognized

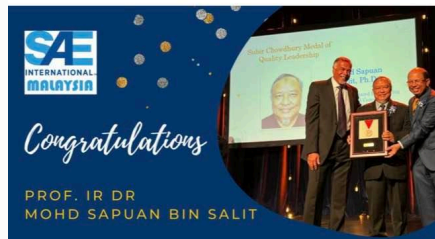


- To succeed in academic career, important to be known and research is achieving recognition.
- Fellowships and awards are rewards for research, good for reputation and support career advancement.
- Some awards come unexpectedly; others require some effort.

< SAE Malaysia 1 h · ...
THE CONFERMENT OF THE SUBIR CHOWDHURY MEDAL
OF QUALITY LEADERSHIP

Congratulations to Prof Ir Dr Mohd Sapuan Salit (Universiti Putra Malaysia) on his recent conferment of the Supir Chowdhury Medal of Quality Leadership, presented in the SAE 2022 Awards, Detroit, Michigan.

Details of the award: <https://www.sae.org/participate/awards/subir-chowdhury-medal-of-quality-leadership>



Pensyarah UPM terima anugerah SAE Subir Chowdhury Medal of Quality Leadership



Examples of recognition

- International invitations to collaborate on research
- Working in a reputable university
- International recognition
- Prestigious award
- Research exhibition
- Huge opportunities for young researchers
- e.g. Young National Scientist Award





Profesor Gred Khas 'A' bidang komposit, saintis terbaik dunia, Malaysia terima anugerah khas

ANUGERAH TOKOH PEKERJA UPM

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WITH KNOWLEDGE WE SERVE

Serve

International Society of Bionic Engineering

Presents the

Outstanding Contribution Award

to

Mohd Sapuan Salit

In Recognition of Distinguished Contributions in the Field of Bionic Engineering

September 16, 2022



Thomas Stegmaier

Thomas Stegmaier
President, ISBE

Prepare a good CV

- We have done a lot like write papers, conference presentation, and perform services.
- Keep comprehensive record of these activities.
- This record, i.e. CV serves as evidence for promotion, grants and job applications.

JOB TITLE	
 <p>Name & Surname Address City Phone : 098 23 23 Mail : myail@mail.com</p>	<p>Professional Objective Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam vel egestas nulla. Donec vestibulum dapibus mi at venenatis. Integer</p>
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<p> Work Experience</p> <p>Start date / End date : JOB TITLE - Company name - Industry - Location A brief description of your achievements in that job Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam vel egestas nulla. Donec vestibulum dapibus mi at venenatis.</p> <p>Start date / End date : JOB TITLE - Company name - Industry - Location A brief description of your achievements in that job Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam vel egestas nulla. Donec vestibulum dapibus mi at venenatis.</p> <p>Start date / End date : JOB TITLE - Company name - Industry - Location A brief description of your achievements in that job Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam vel egestas nulla. Donec vestibulum dapibus mi at venenatis.</p> <p>Start date / End date : JOB TITLE - Company name - Industry - Location A brief description of your achievements in that job Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam vel egestas nulla. Donec vestibulum dapibus mi at venenatis.</p>	<p>Results</p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Lorem ipsum dolor sit amet, consectetur adipiscing elit.</p>
<p> Others Informations / Hobbies</p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam vel egestas nulla. Donec vestibulum dapibus mi at venenatis.</p>	

Review the performance



- Performance review is important in preserving and improving research capabilities.
- Universities have formalized review processes for lecturers.
- e.g. student and peer evaluations of teaching, assessments of research output, and annual performance reviews.
- These evaluation are important because they are components of promotion and other decision-making processes.



Performance
Review

Get refreshed



- Long holidays, job autonomy, social status and flexible working hours make life as lecturer attractive to outsiders.
- But observers do not see intensity of pressures in universities.
- Anxiety, stress, depression and mental health problems are increasing amongst lecturers.
- Take holiday and get refreshed.

Fresh
Holiday

Get informed and stay current

- For excellent researcher, keep abreast of research work and current events in and around the field.
- What is going on?
- Who is doing what?
- Why?
- Where?
- It is done out of curiosity, it is rewarding to be comprehensive and systematic in the quest.





Oral presentation

- Talking about research is career-supporting opportunity.
- Speaking at forum and conferences is letting others know about the research.
- It opens up collaborations with others.
- Spoken presentations can also support career more directly.



Oral presentation (cont.)

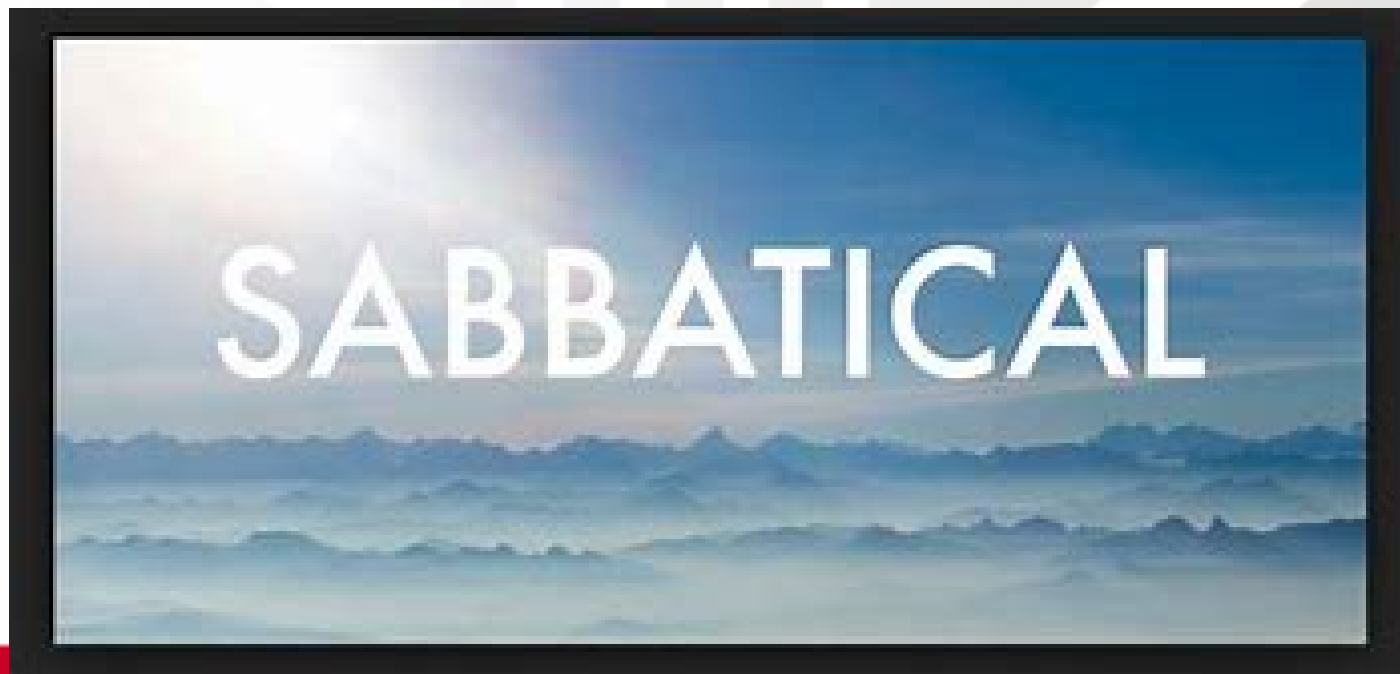
- Present papers in conferences
- Invited, keynote and plenary lectures
- Present seminars and webinars
- Conduct training





Take sabbatical

- Sabbatical leave is privilege not a right.
- For lecturers, release from teaching, committees and academic duties enables to launch independent research, writing books etc.



Preserve public reputation



As academic you are a public figure.

Semester after semester, year after year, you taught classes of tens to hundreds of students.

Your video-recorded lectures were viewed by students never meet face to face.

They know by name, background, and interests.

When you are out and about – current and past students see you and watch you go about your day-to-day activities.



Stay happy and healthy



- Staying happy and healthy are important for career success.
- Happiness is determined by genetic character, salary, work location, office space, material possessions and affected by beliefs and behaviours.
- Keeping stress under control
- Feeling confident as a researcher

*Healthy
&
Happy*



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Manage disruption, transition and interruption successfully

- Moving from one position to another
- Pregnancy, children and other major life events



Conclusions

- Balance of work is important for good researcher: teaching, research, service, family and social responsibility
- The aim is to discover the truth
- With hard work, nothing is impossible
- We can make the change – big change
- believe to discover the truth, although majority is against you





Acknowledgements

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- To Dr Tarique Jamal- UPM for helping to prepare the presentation





TERIMA KASIH/*THANK YOU*

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