

Focused Section on TMECH/AIM Emerging Topics: Initiative, Development and Current Status

Presentation for The 25th-Anniversary Event of AIM

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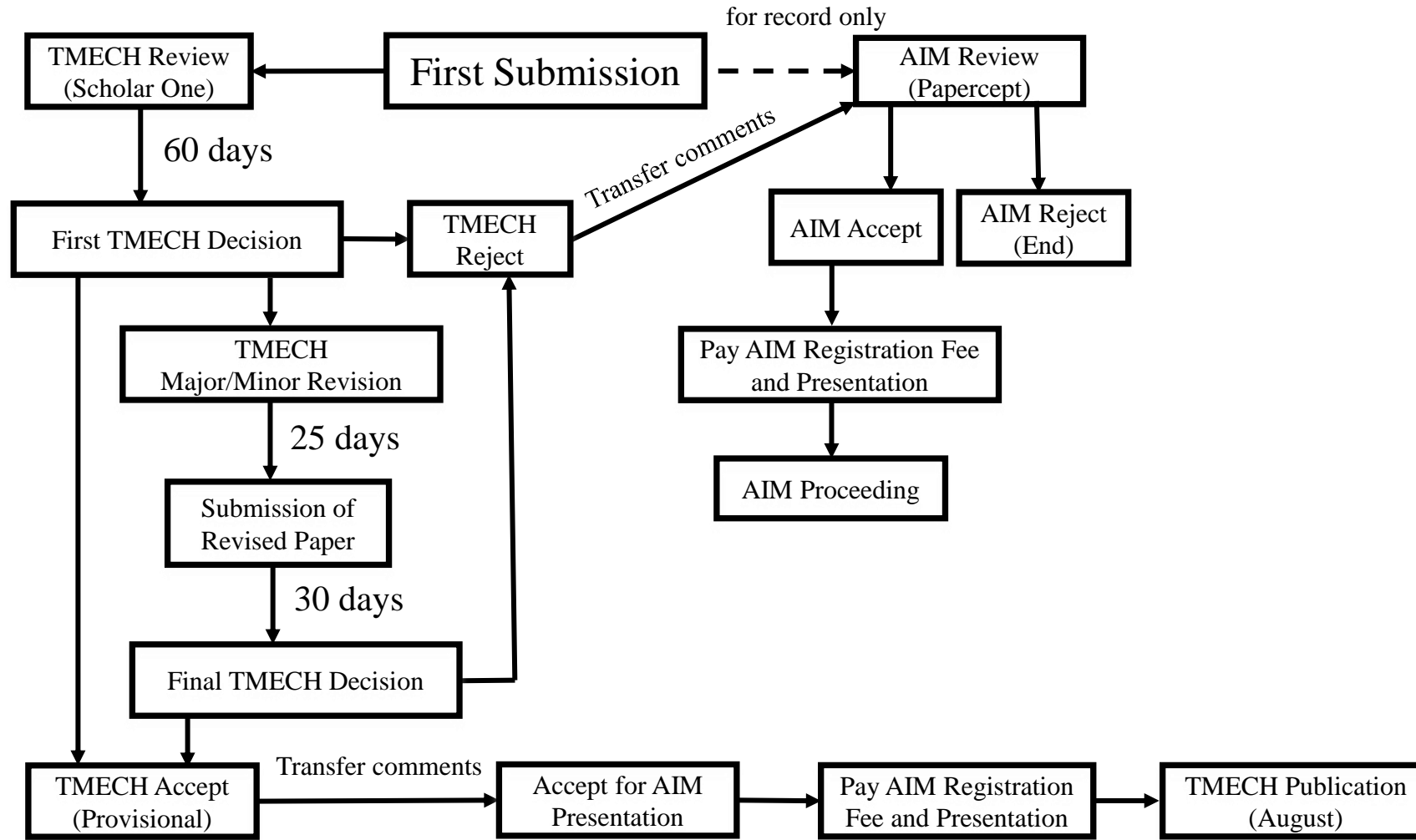
Motivation and Initial Discussions:

- To expedite the dissemination of novel and significant research results or technology breakthrough within the scopes of TMECH. The results and breakthrough need not to be comprehensive but must be solidly validated with real experiments and/or convincing simulations.
- To provide the timely access of the accepted TMECH/AIM papers to AIM conference attendees.
- Initial discussion of ideas: various occasions in late 2018;
- Intensive discussions: ICRA 2019 (Montreal) and AIM 2019(Hong Kong)
- Group of people involved in discussion: AIM Advisory/Steering Committee; TMECH EICs(I-Ming Chen and George Chiu); CEB for AIM (Hiroshi Fujimoto and Tomoyuki Shimono); OpCom for AIM 2020 (Jingang Yi, Xiang Chen, and Xiaobo Tan).

Motivation and Initial Discussions:

- Standard and Criterion: same standard of quality and format requirements for TMECH regular papers is observed in evaluation of TMECH/AIM FS submissions.
- Accepted Focused Section Papers are qualified for consideration of the Best Student Paper of AIM conference (but not for the Best Conference Paper)
- Rejected Focused Section Papers could proceed to be considered for regular AIM conference paper or recommended to be submitted to regular track of TMECH with revision.
- Title of Focused Section: xth Edition of Focused Section on TMECH/AIM Emerging Topics

Review Timeline of TMECH/AIM Focused Section Submissions



Motivation and Initial Discussions:

- Organization of Focused Section: officially sanctioned by Management Committee of TMECH, the Focused Section is managed by TMECH EIC and executed by two Leading Guest Editors (one from TMECH Senior Editor and one from AIM Program Chair) with a dedicated Editorial Board.
- Guest Editors in dedicated Editorial Board must have (equivalent) qualification and credential of TMECH Technical Editor.

Inaugural (1st) Edition of Focused Section on TMECH/AIM Emerging Topics

Organization of Inaugural Edition of TMECH/AIM Focused Section:

- TMECH: I-Ming Chen (TMECH EIC), Xiang Chen and Xiaobo Tan(LGEs), Kara McArthur (TMECH Managing Editor), dedicated Editorial Board
- AIM 2020: Jingang Yi and Xiaobo Tan(AIM 2020 GC and PC), Hiroshi Fujimoto and Tomoyuki Shimono (CEB Chair and Secretary), dedicated Editorial Board in CEB.
- Strong support from Editorial Board of TMECH.

Tremendous work was performed for configuration of paper submission sites (S1M and Papercept), formulation of submission procedures and review process, formation of a dedicated editorial board, coordination between TMECH and AIM conference, etc.

2nd Edition of Focused Section on TMECH/AIM Emerging Topics

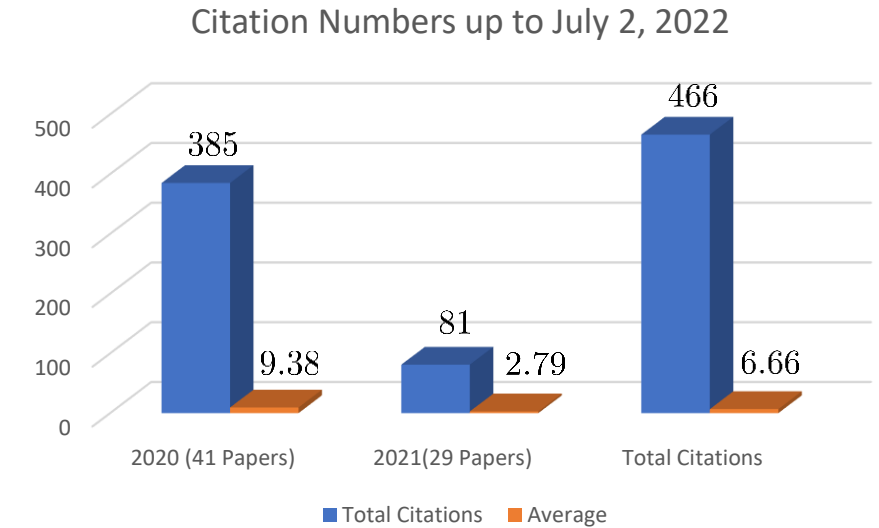
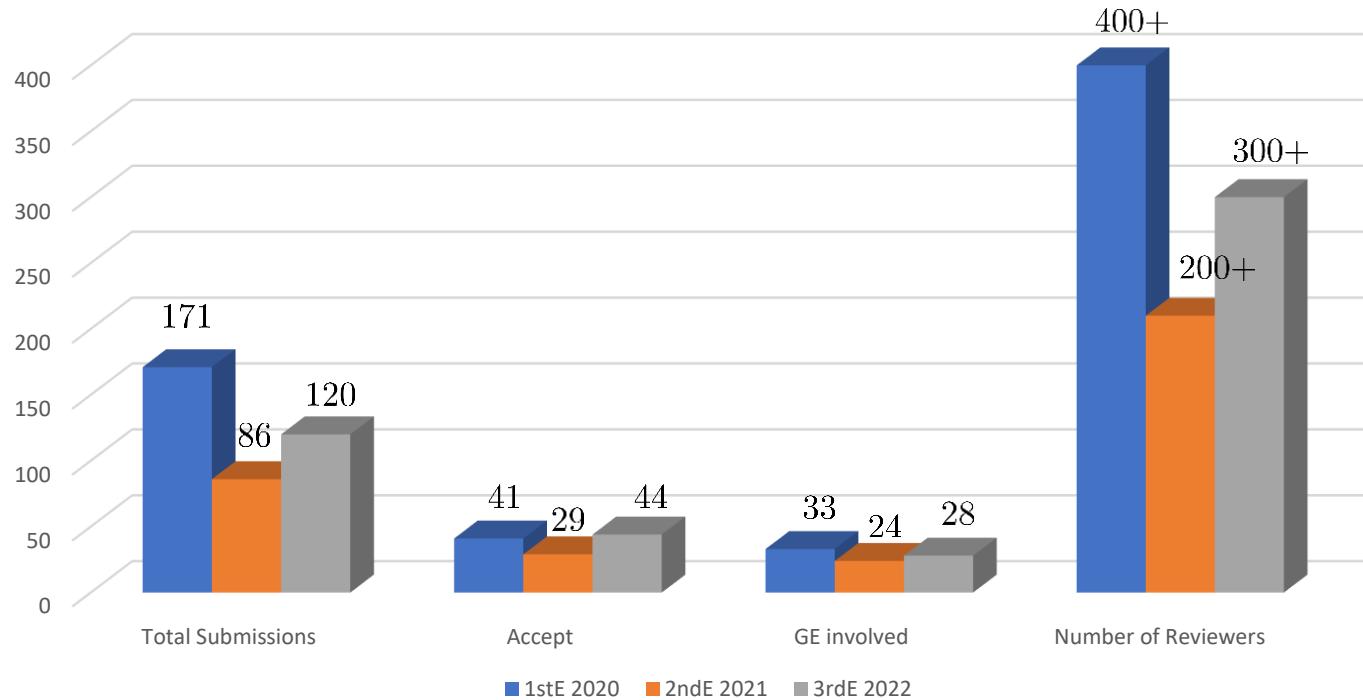
Starting from 2nd Edition of Focused Section: LGE from TMECH and the dedicated Editorial Board are termed with 2-3 years to preserve the consistency of review quality.

- TMECH: I-Ming Chen (TMECH EIC), Xiang Chen and Bram Vanderborght (LGEs), Kara McArthur (TMECH Managing Editor), termed dedicated Editorial Board
- AIM 2020: Heike Vallery and Bram Vanderborght (AIM 2020 GC and PC), Jun Ueda (CEB Chair), dedicated Editorial Board in CEB.
- Strong support from Editorial Board of TMECH.

3rd Edition of Focused Section on TMECH/AIM Emerging Topics

- TMECH: I-Ming Chen (TMECH EIC), Xiang Chen and Toshiaki Tsuji (LGEs), Kara McArthur (TMECH Managing Editor), termed dedicated Editorial Board
- AIM 2022: Mihoko Niitsuma and Toshiaki Tsuji (AIM 2022 GC and PC), Jun Ueda (CEB Chair), dedicated Editorial Board in CEB.
- Strong support from Editorial Board of TMECH.

Statistics of Three Editions of TMECH/AIM Focused Sections



- Quality of submissions is higher and higher
- Strong community interests and support
- Rigorous review process at TMECH standard

Citation numbers are collected from Google Search

Impacts of TMECH/AIM Focused Section

- Valuable complement to regular TMECH Issues as an annual highlight of state-of-the-art progress and breakthrough in all aspects of mechatronics
- Quick access to mechatronics communities
- Enhancement of AIM conference as FS papers are blended into presentation sessions.

Outlook of TMECH/AIM Focused Section

- Continue to build solid reputation as an elite and collective annual highlight/headline of progress and breakthrough in mechatronics
- Further attraction of interests and trust from broader mechatronics communities
- Further enhancement of AIM conference

Acknowledgements

- Management Committee of TMECH
- Advisory/Steering Committee for AIM conference
- All authors of 377 submissions
- More than 700 anonymous reviewers
- 52 Guest Editors
- TMECH editorial board
- Conference Editorial Board for AIM