
Survey of Practice-Academic Collaboration
IFAC Industry Committee

**Preface to the Survey:**

We greatly appreciate your willingness to participate in this request for information. We anticipate it might take up to about 25 minutes of your time.

This survey is intended to collect information on collaborations between academia and the practice. The "Practice" includes all that use control – those who apply or develop might be in the manufacturing industry, the military, research labs, service providers, government agencies, device manufacturers, and such. "Academe" refers to those teaching and doing automation/control research in engineering programs.

The objective is to publish a document of best practices related to successful and sustainable collaborations between academe and the practice; hopefully to facilitate successes.

Collaboration could include: joint research or development, distance education, guest lectures and seminars, co-development of challenge problems, advisory committees, curriculum development taskforces, equipment/software donations for instruction or for research, faculty sabbaticals in industry, co-op and intern programs, practice school graduate programs, …

The survey data will be analyzed by a taskforce within the "Industry Committee" of the International Federation of Automatic Control (IFAC, https://www.ifac-control.org/), created to address and bridge "the gap". Taskforce members (August 2020) are:

David A. Anisi, Associate Professor, NMBU/UiA, Oslo, Norway
Philippe Goupil, Dr., Airbus, France
Chris Manzie, Professor, The University of Melbourne, Australia
R. Russell Rhinehart (Russ), Professor Emeritus, Oklahoma State University, USA
Bran Selic, President and Founder, Malina Software Corp. Canada
Atanas Serbezov, Professor, Rose-Hulman Institute, USA
Jaroslav Sobota, Control System Engineer, NTIS Research Centre, University of West Bohemia in Pilsen, Czech Republic

If you would like to provide information on more than one initiative, please do it on separate surveys. If the collaboration no longer exists, the information about it will still be useful to guide best practices.

Unless we have your permission, all information will remain anonymous, and any report will be free of specific connectivity. If you prefer to not provide some information, just leave that question blank. We

will be following the IFAC privacy policy in processing the data: https://www.ifac-control.org/privacy-policy.

For your awareness of the information we are seeking, here is an outline of the survey.

**Survey Outline (as a respondent preview):**

1. Consent.
2. Name and affiliation of responder.
3. Title of the Collaboration Initiative.
4. Location of the Collaboration Initiative.
5. Academic discipline(s) involved.
6. Application domain(s) involved.
7. Practice sector(s).
8. Academic sector(s).
9. Description of how the participants interact.
10. Funding portion – Industry, Government, Foundation, Academe.
11. Benefits/Incentives to all participants.
12. Key attributes essential for success.
13. Top several dos and don'ts for success.
14. Additional comments.

**Survey:**

1. Do we have your permission to connect your identity to the information you will provide? – A yes or no field to check. If a yes, continue with Q2. If a no, survey skips to Q3. This is a mandatory question. One box must be checked.
2. Name and contact information of the responder – two fields to fill in by responder.
3. Experience of the responder (check all that apply) – two fields to check academe or practice.
4. Title and Internet address (if possible) of the collaboration initiative – two fields to fill in by responder.
5. Status of the collaboration: a box to check – active or inactive?
6. Would you be willing to have a committee member contact you? – a yes or no item to check.
7. Do you wish to only provide your commentary about your experience with practice-academic collaboration, and not take the structured survey? – One of two items to check. Don't label them "Yes" or "No". Label them "Skip to the end to provide open ended commentary" and "Continue with the survey".
8. Location (Country or Political/Economic Region) – field to fill in by responder.
9. Academic discipline(s) involved (check all that apply) – item(s) to check by responder – aero, bio, chemical, civil, computer, electrical, industrial, mechanical, nuclear, other 1, other 2, other 3 (fields to fill in by responder if checked).
10. Application domain(s) involved (check all that apply) – aero, automotive, communication, energy, military, manufacturing, process, security, space, other 1, other 2, other 3 (fields to fill in by responder if checked).
11. Practice sector(s) involved (check all that apply) – item(s) to check by responder – consortium lab, government lab, government agency (non-military), industry (supplier/vendor), industry

(user), military/defense, product vendor, service provider, other 1, other 2, other 3 (fields to fill in by responder if checked).

12. Academic sector(s) (check all that apply) – research/science focus, research/application focus, teaching focus, graduate program, undergraduate engineering program, undergraduate technology program, other 1, other 2 (fields to fill in by responder if checked).
13. Description how participants interact (e.g., one-to-one relation or multiple partners; weekly, monthly, or annual exchanges; written or in-person report; how is funding handled; fixed or open-end timeline?) – field to fill in by responder – at least a few sentences, perhaps a paragraph or so – need ample space.
14. Funding portion (record the approximate %, include in-kind support) – Industry, Government, Foundation, Academe. Field to fill in for each sector.
15. From your perspective, what are the benefits of this interaction to the following participant groups (where applicable) – a field to fill in with a few words for each of these several classifications – students, faculty, university, practice representatives, practice organization, other 1, other 2, other 3.
16. List a few attributes of the program and of the participants that are essential for success for academe – 2 fields for the respondent to fill in with a few words each.
17. List a few attributes of the program and of the participants that are essential for success for the practice – 2 fields for the respondent to fill in with a few words each.
18. Provide your top several dos for sustainable success – four fields. Space to accept a sentence or three each.
19. Aspects that create barriers to collaboration – four fields for respondent to fill in with space to accept a sentence or three each.
20. Provide references to publications/outputs about the program – not research papers but public descriptions of the program.
21. Additional comments – room for a few paragraphs.