CONFERENCE
&
CONFERENCE PAPER

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CONFERENCE

Conference is a gathering of a particular set of individuals invited to consult with, discuss or present information on a particular topic for the purpose of bettering relations and information between the organization or market the individual represent'.

Conference is prearranged meeting for consultation or exchange of information or discussion

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FUNCTIONS OF CONFERENCE

- Alexander King has summarized the main functions of conference thus;
- Announcement of new knowledge.
- Exchange of information and experience.
- Education.
- Formulation of problems and situations.
- Fact-finding and reporting
- Negotiation and policy formulation
- Status and ceremonial congregation

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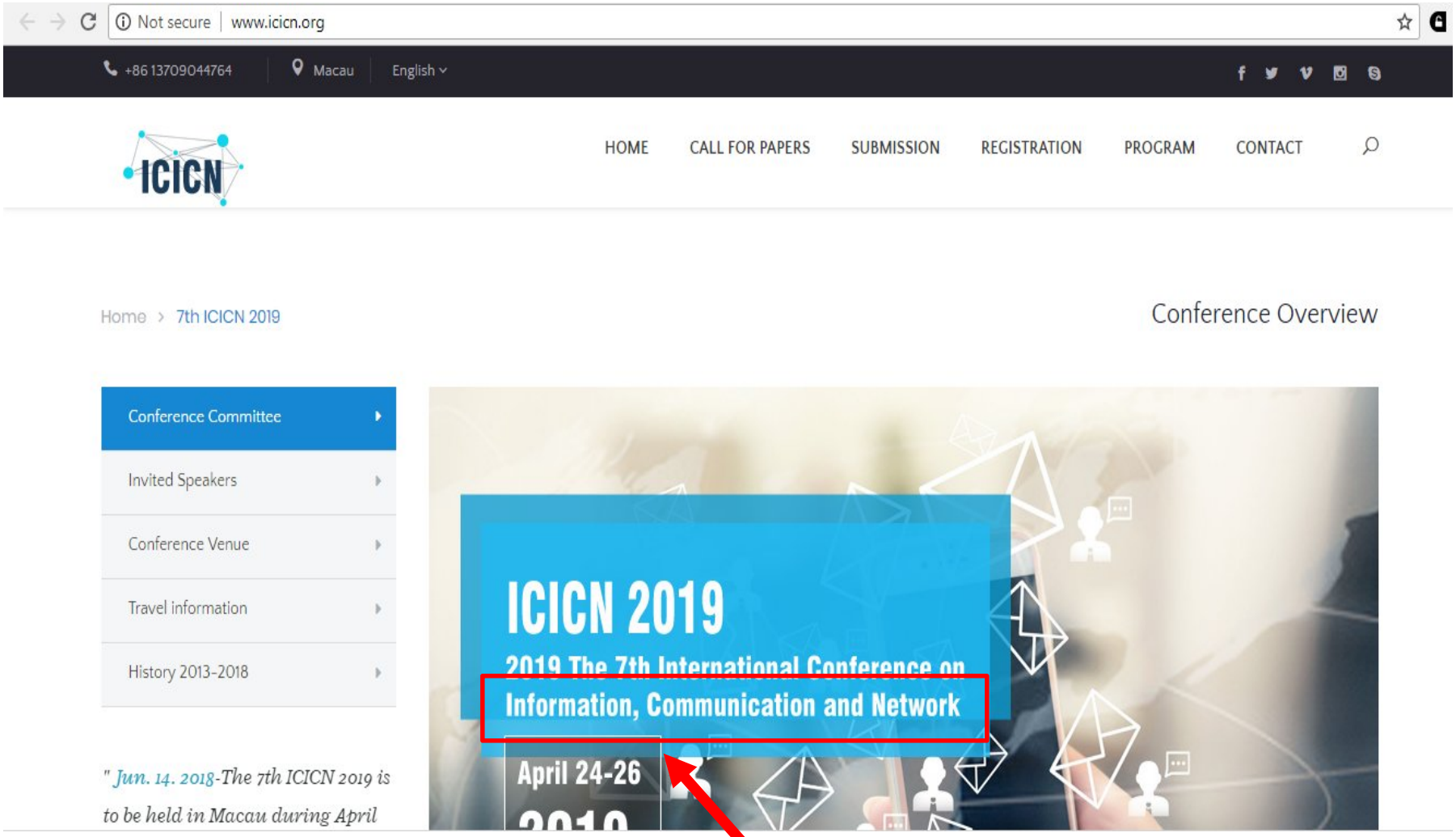
Every conference (International/ National) choose an area/ areas of focus to guide the conference participants, paper submissions scheduling programs for it , better known as Theme of the Conference

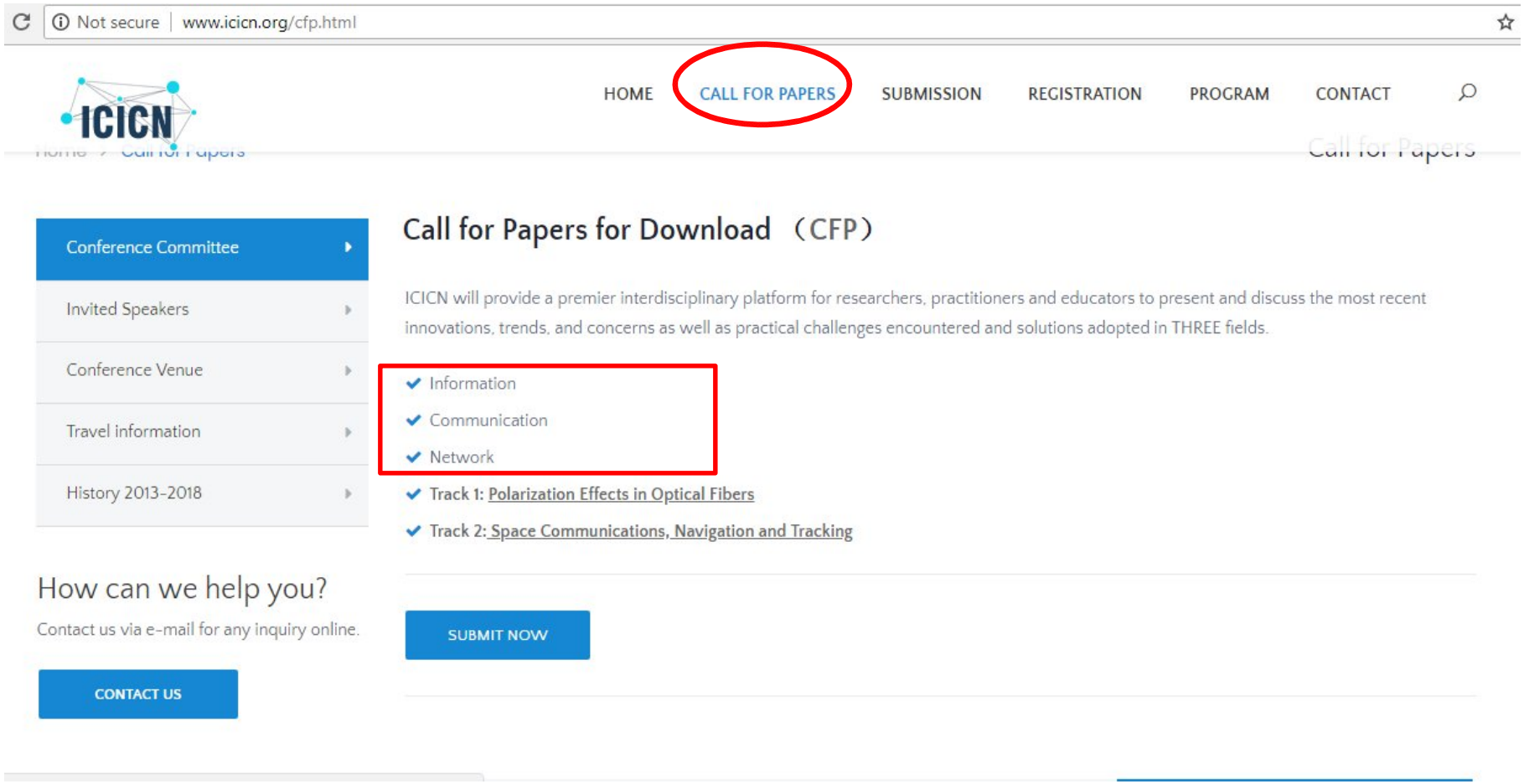
CONFERENCE WEBPAGE



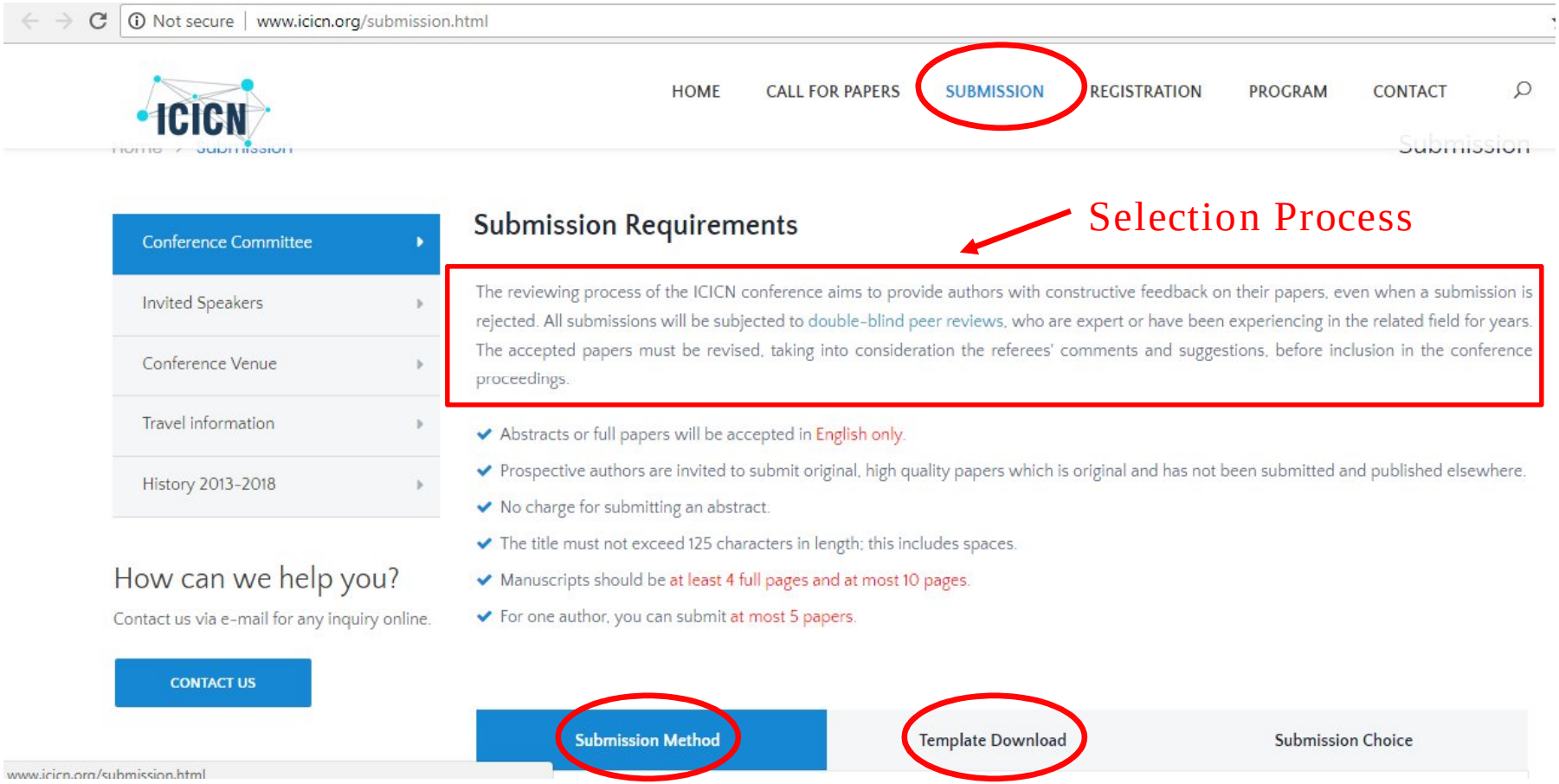
Conference Theme

Refer this link:- http://www.icicn.org/

CALL FOR PAPERS



SUBMISSION OF PAPER AND SELECTION PROCESS



CONFERENCE PAPER

Conference papers refer to articles that are written with the goal of being accepted to a **conference**: typically an annual (or biannual) venue with a specific scope where you can present your results to the community, usually as an oral presentation, a poster presentation, or a tabled discussion.

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- The review process for conference papers is typically within a fixed window: everyone submits for a certain deadline, then the review committee (program committee) collaborates to review and discuss papers, then all authors are notified with accept/reject at the same time.

- Since the review process has a fixed schedule (to meet the schedule of the physical meeting), conference review times are quite predictable.

- Conference papers are typically published in collections called "proceedings": sometimes these are printed by university presses, by professional organizations, by big-name publishers, or simply online

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- Since conference papers have a fixed schedule and provide the authors a venue for discussion and feedback, they are generally for earlier-term work or for "announcing/marking an idea", or for finding collaborators.

- Furthermore, conference papers tend to have fixed page-limits, which restricts the content to preliminary findings

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The WRITING CENTER
The University of North Carolina at Chapel Hill

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Conference Papers

View All Tips & Tools

What this handout is about

This handout outlines strategies for writing and presenting papers for academic conferences.

What's special about conference papers?

Conference papers can be an effective way to try out new ideas, introduce your work to colleagues, and hone your research questions. Presenting at a conference is a great opportunity for gaining valuable feedback from a community of scholars and for increasing your professional stature in your field.

A conference paper is often both a written document and an oral presentation. You may be asked to submit a copy of your paper to a commentator before you present at the conference. Thus, your paper should follow the conventions for academic papers and oral presentations.

Link:-https://writingcenter.unc.edu/conference-papers/

KEYNOTE ADDRESS

- a keynote address is a speech that sets the theme and tone for a meeting or conference
  - emphasizes the importance of the topic or the purpose of the meeting, motivates the audience, and sets the theme for other speakers or events

A greater importance is attached to the delivery of a keynote speech or keynote address. It is also known as a plenary session

At conference, very often eminent scholars, researchers in respective area delivers keynote address. They are called as Keynote speakers

The keynote address establishes the framework for the following program of events or convention agenda; frequently the role of keynote speaker. Keynote address is delivered to set the underlying tone and summarize the core message or most important revelation of the event, conference :-

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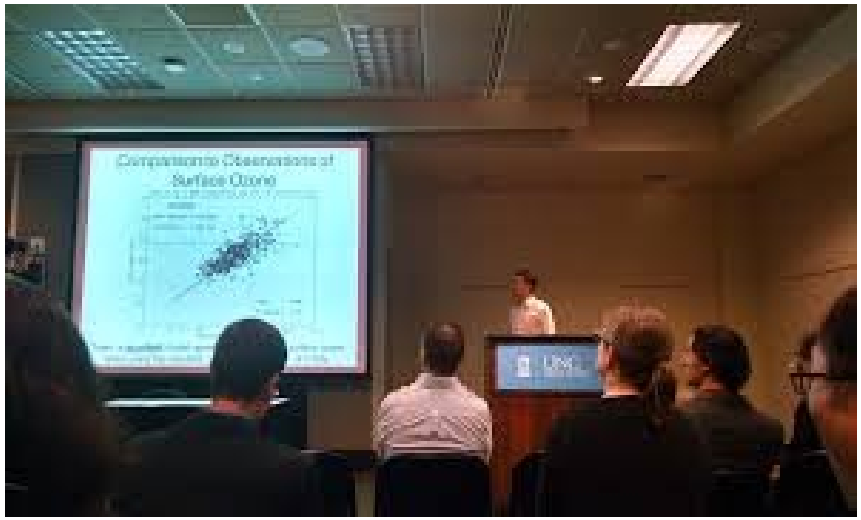
ORAL PRESENTATION



Like scientific papers, **oral presentations** at a **conference** or internal seminar are for sharing your research work with other scientists.

It must convince the audience that the research presented is important, valid, and relevant to them.

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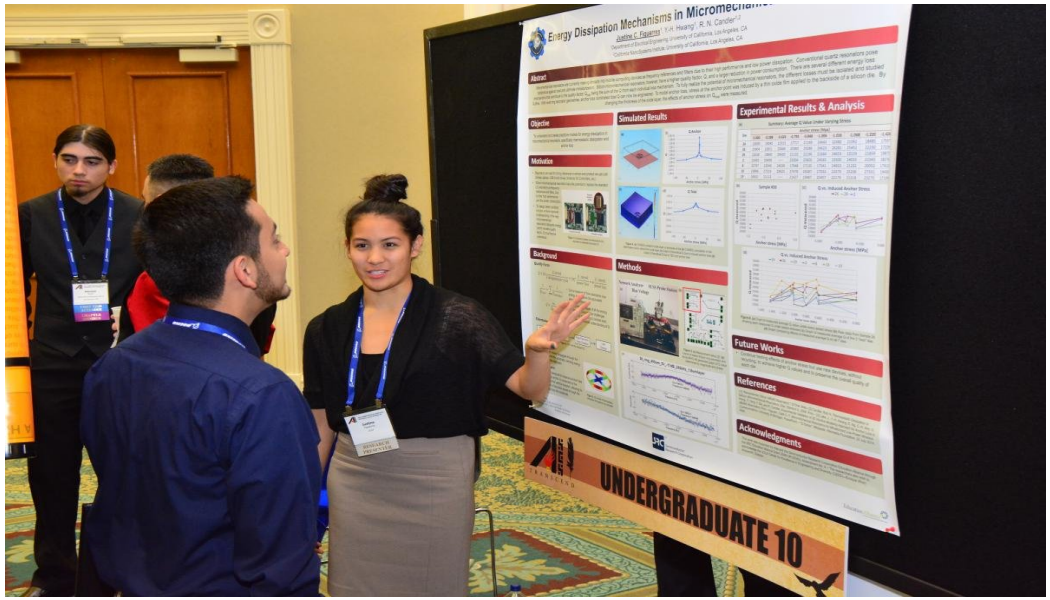
POSTER PRESENTATION



A **poster presentation**, at a conference with an academic or professional focus, is the presentation of research information, usually peer-reviewed work in the form of a paper poster that conference participants may view.

A **poster session** is an event at which many such posters are presented.

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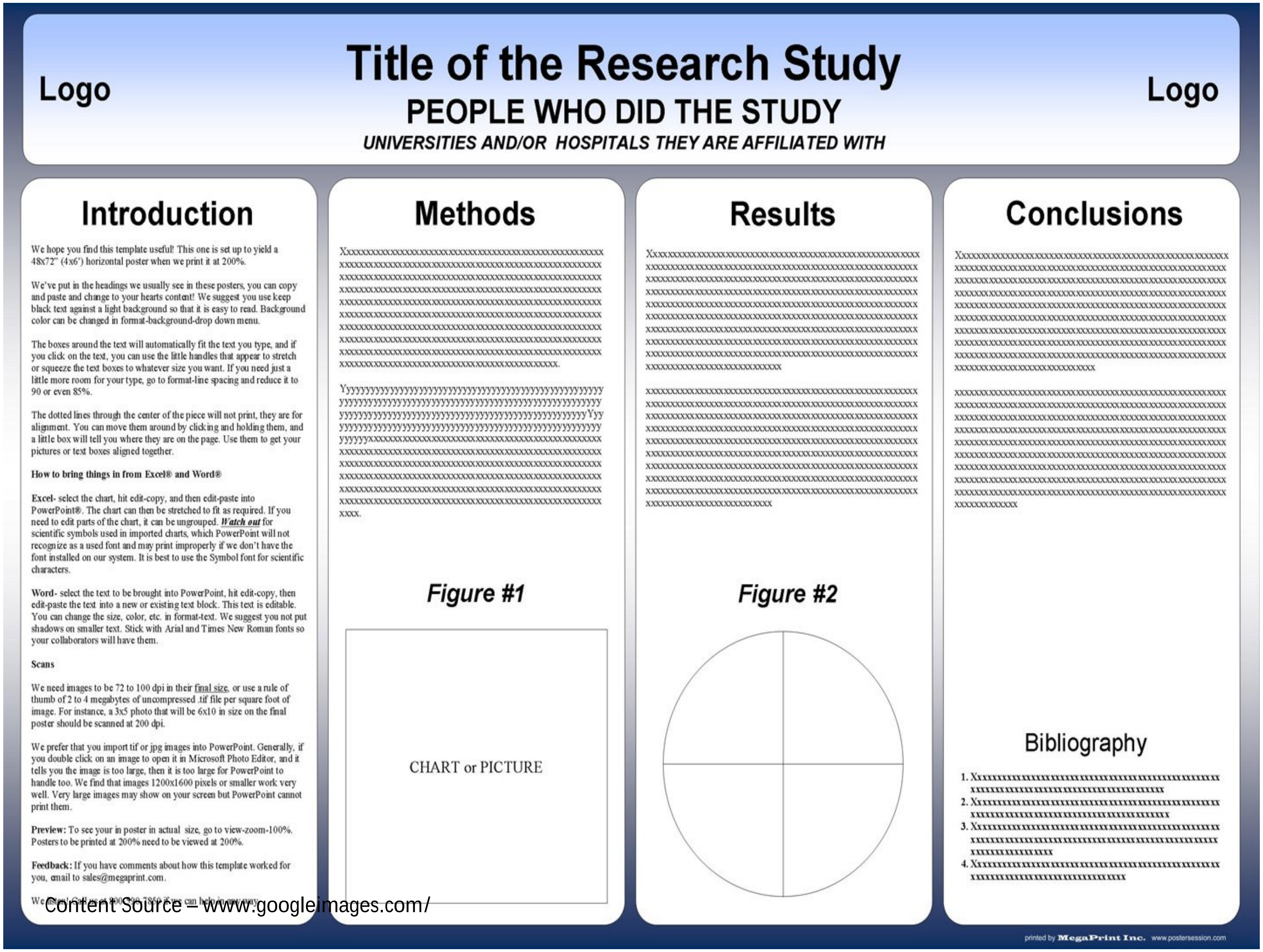
FORMAT OF A POSTER



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SAMPLE POSTER

Modeling of Capillary Forces and Binding Sites for Fluidic Self-Assembly

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Abstract

In next generation MEMS, micromechanical sensors and actuators will be integrated with electronic, optical, and fluidic components onto a variety of substrates to create powerful, complex microsystems. Massively parallel **micro self-assembly** is an efficient, low-cost alternative to complex, monolithic fabrication processes or robotic pick-and-place microassembly.

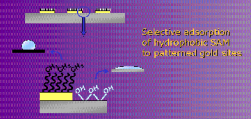
Fluidic self-assembly is driven by hydrophobic-hydrophilic surface patterning and capillary forces between binding sites. Design of an effective self-assembly system requires understanding of interfacial phenomena; improvement of its performance involves optimization of binding site shapes and surface chemistry.

Modeling and computational tools: strong, close-range attractive forces governing fluidic self-assembly are approximated by a geometric model, which allows application of efficient algorithms to predict system behavior.

Results: Various binding site designs are analyzed, and results are compared with experimental observations. For a given binding site design, the model predicts the outcome of the self-assembly process by determining minimum energy configurations and detecting unwanted local minima, thus estimating expected yield. These results can be employed toward the design of more efficient self-assembly systems.

Microfluidic Self-Assembly: Experimental Methods

- Patterning of SiO_2 surfaces with Cr/Au layer.
- Surface treatment with octadecanethiol self-assembled monolayer (SAM) renders Au surfaces hydrophobic but leaves SiO_2 surfaces hydrophilic (adapted from Whitesides et al.).
- Coat substrate sites with hydrocarbon lubricant / heat-activated adhesive.
- Microparts are directed towards substrate by agitation.
- Capillary forces of adhesive lead to shape matching self-assembly.



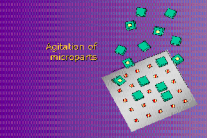
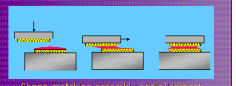


Table 1: Interfacial Energies

Interface	Interfacial Energy γ (mJ/m²)
SAM - H_2O	≈ 46
SAM - SiO_2	≈ 46
SAM - hexadecane	< 1
H_2O - hexadecane	52.2 *
H_2O - SiO_2	< 1

Interfacial energies of surface materials used in fluidic self-assembly. Values determined by contact angle measurements except * from literature.



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- Berkeley Microfabrication Facility staff for advice and support.

Modeling Approach

Describe interfacial energies during self-assembly of a part onto a substrate.

$$W = \gamma_{P,S} \cdot |P \cap S| + \gamma_{P,H_2O} \cdot |P - S| + \gamma_{S,H_2O} \cdot |S - P| - \left(\gamma_{P,H_2O} \cdot |P| + \gamma_{S,H_2O} \cdot |S|\right) \quad (1)$$

- W : difference in interfacial energy after (top line) and before (bottom line) assembly.
- |P|, |S| : surface area of part P, substrate binding site S.
- $\gamma_{A,B}$: interfacial energy between surfaces A and B.

Assumptions:
- $\gamma_{A,H2O} \approx 0$ for any hydrophilic surface A.
- $\gamma_{A,A} \approx 0$ for all surfaces A.
- $\gamma_{A,B} \approx \gamma_{A,H2O}$ for two hydrophilic surfaces A and B.

Then eq. (1) simplifies to

$$W = -\left(\gamma_{P^-,H_2O} + \gamma_{S^-,H_2O}\right) \cdot |P^- \cap S^-| \quad (2)$$

where P^- and S^- are the hydrophobic surface regions of P and S.

If the hydrophobic coatings of P and S are equal, eq. (2) simplifies further to

$$W = -2\gamma_{=} \cdot |P \cap S| \quad (3)$$

where $\gamma_{=}$ is the interfacial energy between hydrophobic and hydrophilic surfaces.

Algorithms and Implementation

Goal: Determine surface energy of part P and substrate S in any given assembly configuration specified by (x,y,θ) position of P relative to S.

Input: Design of hydrophobic binding sites P^- and S^-; (x,y,θ) sample coordinates.

Output: Binding energy W as function of (x,y,θ).

Algorithm: Idea: W is proportional to geometric intersection $P^- \cap S^-$, after eq. (3). Thus, $W(x,y) \propto P^- * S_x^-$ (i.e., convolution of P^- and S^- rotated by π).

- Digitize P^- and S^- (1 → hydrophobic, 0 → hydrophilic)
- For all θ, compute $W(x,y) = -2\gamma_{=} P_\theta^- * S_\pi^-$ (P^- rotated by θ and S rotated by π)

Implemented in Matlab®. Fast convolution algorithm for fixed θ and arbitrary (x,y) values.

Conclusions

- Development of a novel model and computational tools for efficient analysis and simulation of fluidic self-assembly.
- Fast algorithms based on convolution and Fast Fourier Transform (FFT) can determine energy levels for arbitrary binding site designs.
- Prediction of desired and undesired configurations during self-assembly process allows estimation of performance, optimization of binding site designs, and elimination of failure modes.
- Good accordance between predicted and experimentally observed behavior.

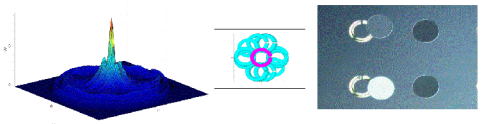
Future Directions

- Incorporation of algorithms from Computational Fluid Dynamics for modeling of liquid forces.
- Automated design optimization for self-assembly: model provides evaluation method that guides search for optimal binding site designs.

The software is available upon request from Karl Böhringer, karl@ee.washington.edu.

Experiment 1: Assembly of Ring-Shaped Binding Sites

Both part and substrate binding sites have ring-shaped hydrophobic region.



Left: Plot of interfacial energy W (negated) shows local and global maxima.

Middle: Assembly states predicted by simulation.

Right: Assembly experiments with 2 failed and 2 successful assemblies.

Experiment 2: Assembly of Disks on Ring-Shaped Substrate Sites

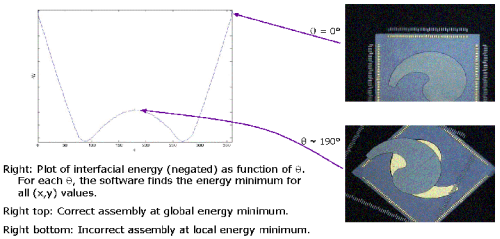
Parts are hydrophobic disks. Substrate has ring-shaped hydrophobic binding sites.

Left: Plot of interfacial energy W (negated) shows only one global maximum.

Right: 4 successfully assembled parts.

Experiment 3: Interfacial Energy as Function of Part Orientation θ

Comma-shaped part that attempts to avoid 180 degree symmetry.



Right: Plot of interfacial energy (negated) as function of θ. For each θ, the software finds the energy minimum for all (x,y) values.

Right top: Correct assembly at global energy minimum.

Right bottom: Incorrect assembly at local energy minimum.

POSTER SESSION

Dennis Schroeder/NREL via flickr.com. Public domain (US government agency)

VALEDICTORY FUNCTION

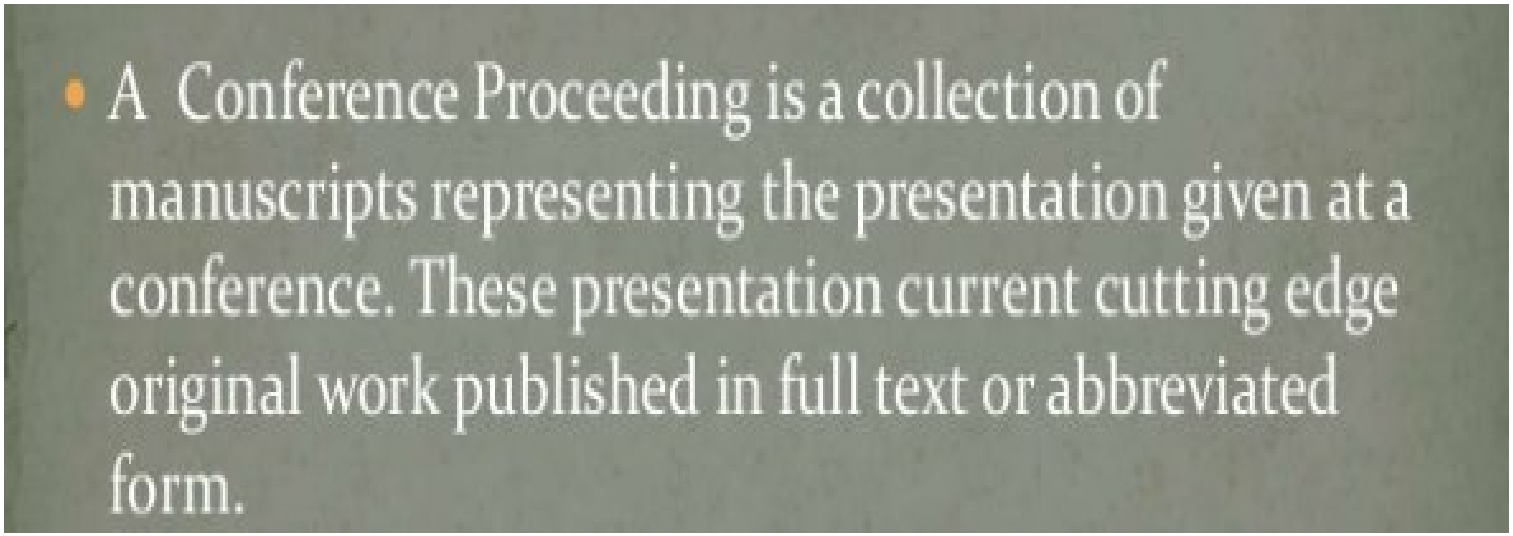
A **valedictory function** is a **function** arranged at end of an activity / Conference in which a group of people have been engaged.

valedictory speech is a **farewell** speech given at Valedictory function.

Certificates are distributed to participants

Winners of Best Paper awards , Poster award are felicitated with trophies, medals and certificates

CONFERENCE PROCEEDINGS



conference proceedings are a collection of academic papers published in the context of an academic conference or workshop. Conference proceedings typically contain the contributions made by researchers at the conference.

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The conference proceedings minimally contain the following items.

- Front Cover
- Title page
- Copyright page
- Table of contents
- Technical papers
- Author Index
- Back cover

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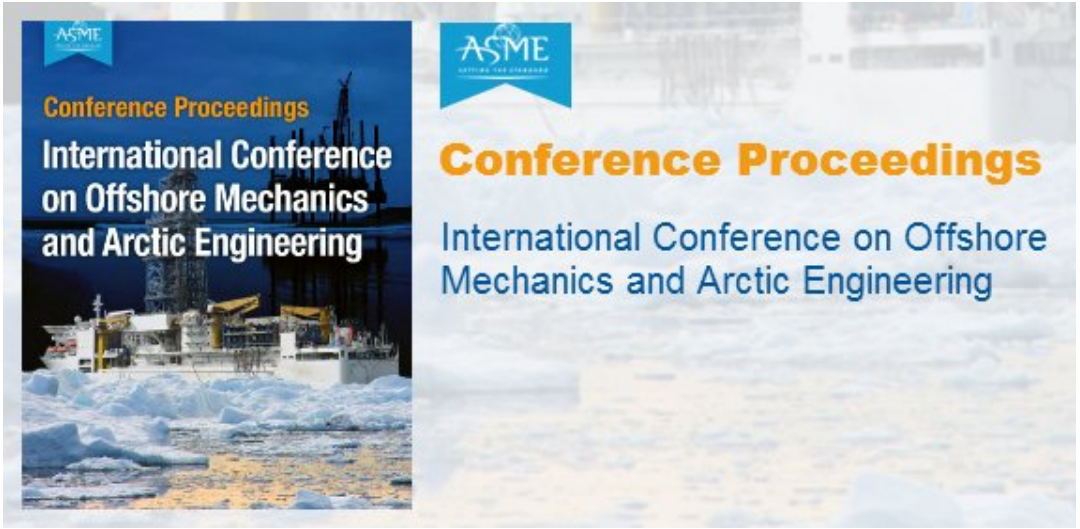

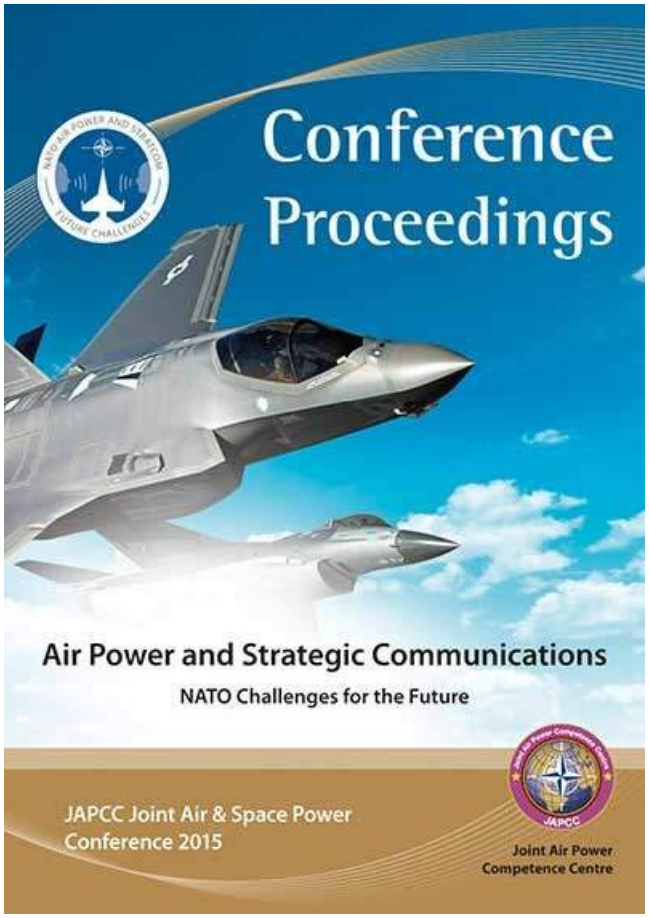

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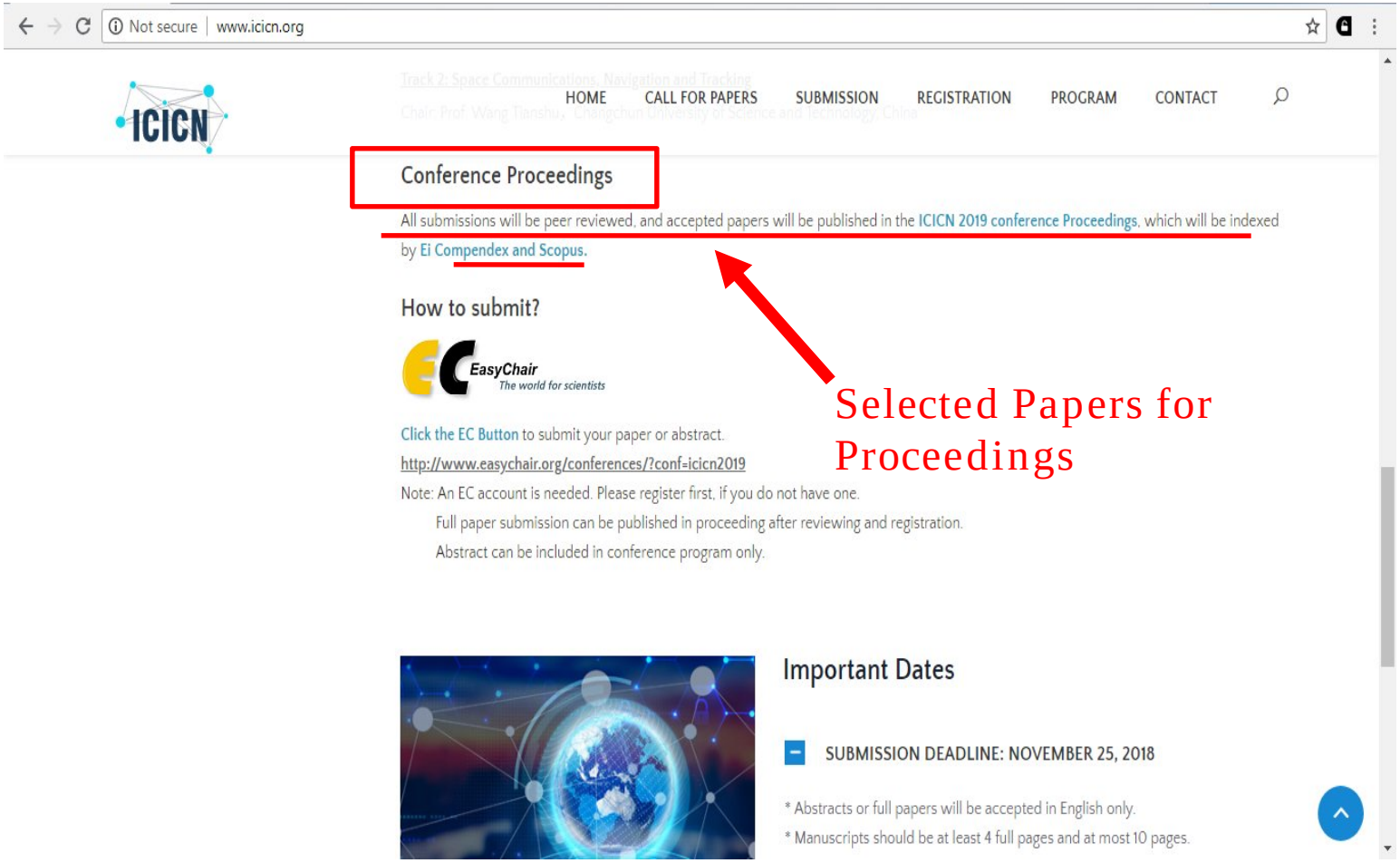

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