

## WORLD CONFERENCES & MEMBER CONFERENCES

IAPRI World Conference or Member Conference are hosted by one of the members on alternating years. World conferences on even numbered years and member conferences on odd numbered years. World conferences are open to all interested parties to apply to make a presentation while member conferences are only open to IAPRI members.

Prospective presenters may submit a manuscript for peer review, or an abstract for a non-peer review contribution (oral presentation or poster). The following information is provided on the requirements and style for each type of presentation.

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## CONFERENCE RESEARCH PAPER ABSTRACT AND PAPER REQUIREMENTS

Abstracts submitted to the general stream undergo a review by selected members of the IAPRI Scientific Committee based on originality, scientific quality, innovation, and significance to the research community. Abstracts may be submitted as oral or poster presentations. The Committee reserves the right to assign final presentation type in the best interest of the program. However, the Committee will accommodate as many oral presentations as the conference schedule permits.

Submissions approved by the IAPRI Organizing Committee will result in the authors preparing a full paper, 4–8–pages in length. This will be published later in the conference proceedings. English language is required, and it is important to use, a coherent writing style and readable sentences.

The paper shall include the following content that follow the prescribe lengths:

**Title and Author Information:**

A clear and concise title that reflects the main topic of the research.

Authors' names with affiliation.

**Abstract (up to 300 words):**

Provide a summary of the research problem, objectives, methodology, key findings, and implications.

**Keywords (3-5 keywords):**

List relevant keywords that describe the subject matter of your research. Avoid repeating words of the title and buzz words.

## 1. Introduction (approximately 1/2 page):

Clearly state the research problem or question related to packaging and the objective of the published work.

Provide context for the research.

Explain the significance of the study.

Summarize relevant literature and prior research related to packaging.

Highlight gaps or controversies in the existing knowledge.

Explain how your research addresses or contributes to these gaps.

## 2. Methodology (approximately 1 page):

Describe the research methods employed in the study.

Explain the data collection and analysis processes.

Justify the chosen methodology and address any limitations.

In general, the methodology section should be precise enough for another research group to reproduce the study.

## 3. Results (approximately 1-2 pages):

Present the primary findings of your packaging research.

Use tables, figures, or diagrams to illustrate key data.

Include any statistical analysis if applicable.

## 4. Discussion (approximately 1-2 pages):

Interpret the results in the context of the research question and objectives.

Discuss the implications of the findings for the packaging industry or related fields.

Address any limitations encountered during the research.

Suggest areas for further research in packaging.

The result and discussion section can be joined if the authors consider it more effective.

## 5. Conclusion (approximately 1/2 page):

Explain how the study and its findings have answered the scientific question or hypothesis set down in the introduction.

Emphasize the significance of the research in the field of packaging.

Offer a concise closing statement.

### References:

Cite all sources used in the paper.

**Acknowledgments (optional):** Acknowledge any funding sources, collaborators, or individuals who contributed to the research.

## APPLICATION CASE STUDY PRESENTATION TYPE EXTENDED ABSTRACT REQUIREMENTS

IAPRI conferences are focused on research presentations with short papers. But we realize that there are usually a few special situations where a broader perspective of the application of packaging research in real life situations can be valuable for the attendees. These often report case studies or present a broad perspective of the application of research results.

These types of presentations, if accepted by the Scientific Committee, are exempt from the requirement of a paper. They are required to submit, in the timeline set by the organizers for abstract submissions, an extended abstract (500-1000 words) following a prescribed format. It should provide enough detail for the Scientific Committee to reach a decision on it, and to be published in the proceedings. Requirements for such abstracts are shown below.

A research application case study and broader perspective presentation at an IAPRI conference is designed to educate the audience through a presentation that aims to provide information, knowledge, or insights on a typical topic area of past or current IAPRI research. They can identify further, deeper research needed associated with the presentations content.

Key characteristics of an informative Case Study presentation at a conference may include:

1. **Content Focus:** The primary focus of such presentations is on sharing objective and verifiable information that highlights real-life examples, case studies, or practical applications prior research findings or expertise on a particular subject.
2. **Objective:** The main objective is to enhance the audience's understanding of the topic or subject matter by providing valuable knowledge that they can apply or learn from.
3. **Structure:** Informational presentations often follow a logical and structured format, such as an introduction, background information, key points or findings, and a conclusion emphasizing its significance and relevance. If applicable, include recommendations for future research.
4. **Credibility:** Presenters are expected to have expertise or authority in the subject matter they are presenting.
5. **Neutral Tone:** The tone of informational presentations tends to be objective and neutral, focusing on providing balanced and unbiased information. **No presentations considered commercial by the Scientific Committee will be accepted.**

These presentations are valuable for sharing knowledge, fostering discussions, and advancing understanding within a specific field or community of interest.

## PROCEDURE FOR ABSTRACT REVIEW AND PRESENTATION SELECTION BY SCIENTIFIC

Submitted abstracts will be evaluated in the following manner:

- 1) Does the subject fit the field of packaging and to the IAPRI topics?
  - Some topics are subject of discussion. Do they fit the field of packaging? Think about new logistics approaches, material development from which it is not clear if it can be used for packaging, developments in printing techniques used for graphics but not straight related to packaging materials etc.
  - The organizer can discuss the issue with the reviewers and can also ask other reviewers to give their opinion.
  - The submitter can finally be asked to make the relation with packaging clearer.
  - The submission can be rejected.
- 2) Is the abstract:
  - a) Original
  - b) Of scientific quality
  - c) Innovative
  - d) Of significance to the research community
- 3) Has the abstract been set up according to the prescribed approach? If not, please mention what is missing and take this up in your review.
- 4) Is the content of the abstract presented in a coherent way?
  - a) Quality of English language
  - b) Readable
  - c) Coherent and a qualitative presentation of the research
- 5) Is the abstract appropriate for an oral or poster presentation?

## CONFERENCE RESEARCH PAPER STYLE GUIDE

Follow these style guide requirements for specific details on the formatting required for IAPRI conference research papers. *Note:* This is a separate style guide for *Research Application Case Study* extended abstracts.

### **Length and Page Count:**

Ensure that the paper falls within the specified 4-8 page limit, excluding the title page, abstract, and references.

### **Page Setup:**

Use Letter size (8.5 x 11 inches) or A4 size (210 x 297 mm) paper depending on the conference requirements.

Set margins to 1 inch (2.54 cm) on all sides.

Font: Calibri, 12-point size, except where indicated differently.

Line spacing: Double-spaced throughout, except where indicated differently.

Alignment: Justified

### **Title and Author Information:**

18-Point Calibri font, centered.

Authors' names: 12-point font, centered, with affiliation listed below.

### **Abstract (up to 300 words):**

Use 10-Point Calibri font, centered single-spaced below the Title and Authors

### **Keywords (3-5 keywords):**

List relevant keywords that describe the subject matter of your research. Avoid repeating words *of the title and buzz words*.

### **Section Headings:**

Use these section headings with suggested lengths.

Introduction (approximately 1/2 page):

Methodology (approximately 1 page):

Results (approximately 1-2 pages):

Discussion (approximately 1-2 pages):

Conclusion (approximately 1/2 page):

References:

Acknowledgments (optional):

Use bold formatting.

### **References**

- Author Last Name First Initial Middle Initial. Title in sentence case. Abbreviated Journal Title in Title Case. Year; Volume (Issue#):PP-PP. doi: ##
- Book: Author last name Initials. Book Title: Subtitle. Publisher; Year.
- Journal: Author last name Initials. Article title. Journal Name. Year; Volume (Issue#):Page range. doi or URL.

- Reference style. AMA – American Medical Association.
- All references should be numbered consecutively in order of appearance and should be as complete as possible. In text citations should cite references in consecutive order using Arabic superscript numerals.
- Use a 10-point font, single-spaced.

## Figures

- Provide informative captions for all figures, placed below the figure.
- Reference figures with the text (e.g., “figure 1 shows...”)
- Number figures sequentially (e.g., Figure 1, Figure 2).
- Ensure figures are of high quality and legible.

## Tables

- Use tables for presenting data when appropriate.
- Reference tables with the text (e.g., “table 1 shows...”)
- Number tables sequentially (e.g., Table 1, Table 2).
- Provide clear titles below each table.
- Ensure tables are well-organized and easy to read.

## Equations

- Use Equation Editor or a similar tool for mathematical symbols and equations.
- Number equations sequentially in parentheses (e.g., (1), (2)).

## Language

- Use clear and concise English language.
- Proofread and edit for grammar and spelling errors.
- Avoid using jargon or overly technical language without explanation.

## Submission

- Submit papers in Microsoft Word (.doc or .docx) or LaTeX (.tex) format.
- Submit your paper electronically through the conference host requirements.

# Influence of Molecular Weight and Shape on Diffusion Coefficients of Small Molecules in Polyethylene Terephthalate

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**Abstract:** In this study, the diffusion coefficients of 13 kinds of small molecules with molecular weights ranging from 32 to 339 g.mol<sup>-1</sup> in amorphous PET are calculated based on molecular dynamics (MD) simulation. The results suggest that diffusion coefficient of migrant depends not only the molecular weight but also the shape of migrant molecules. Further, the free volume of polymer matrix is calculated using Connolly surface method. The results show that some small free volume cavities conjoin together and form the larger cavities which facilitate the diffusion of migrant molecules in polymer matrix. The diffusion trajectories suggest that the molecules in first class move actively, but the molecules in class third class move limitedly and the movement mobility of molecules in second class is between that of first class and third class. The diffusion trajectories of small molecules strongly depend on the shape and molecular weight of migrant molecules, which is consistent with the diffusion coefficients.

**Keywords:** molecular dynamics simulation; diffusion coefficient; molecular weight; molecular shape

## Introduction

Polyethylene terephthalate (PET) is a kind of excellent barrier material and has been widely used in food packaging engineering. A number of low-molecular-weight substances might migrate from the material into the food when PET packaging material contacts food. Diffusion coefficient is very important for migration models, which represents the migration rate and determines the process of migration dynamics. The experimental determination of the diffusion coefficient is very difficult. The literature has reported a series of sophisticated models for theoretical estimation of diffusion coefficients<sup>[1-4]</sup>, however for non-polyolefin polymers such as PET, it seems not as reliable.

A computer simulation technique based on classical mechanics provides a new way to study the diffusion process. Over the last twenty years the molecular dynamics (MD) simulation technique on the basis of classical molecular mechanics has been widely used for the investigation of diffusion of small molecules in polymers<sup>[5-12]</sup>. Pavel and Shanks<sup>[9]</sup> applied the MD simulation technique to study the diffusion of oxygen and carbon dioxide in bulk amorphous PET and related

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aromatic polyesters and focused on the influence of free volume, temperature and number of aromatic rings on diffusion coefficients. Hahn and Mooney<sup>[10]</sup> investigated phenol diffusion in bisphenol-A-polycarbonate by means of MD simulation and obtained an approximate Arrhenius behavior for the diffusion coefficient. Li et al<sup>[11]</sup> used MD simulation to calculate the diffusion coefficients of small molecules with molecular weights ranging from 16.04 (methane) to 452.50 (fluocinolone acetonide) Daltons in four amorphous polymers and compared with the experiments in literatures. These studies provided results which agree qualitatively with experimental observations and suggested that MD simulation technique may be useful in obtaining relative diffusion coefficient. It has been recognized that in general the larger molecular weight, the lower its diffusion coefficient.

## Methodology

However, a precise understanding is lacking for the influence of changes in molecular structure, such as size and shape of molecules, on the diffusion coefficient. For example, at a given molecular weight, linear molecules would diffuse faster than others, spherical molecules being the slowest.

Using MD simulations technique, we decided to measure diffusion coefficients of molecules selected on the basis of their molecular structure and functional groups, including compounds up to molecular weight 339 g/mol. The object of this paper is to reveal the influence of molecular weight and shape of molecules on diffusion.

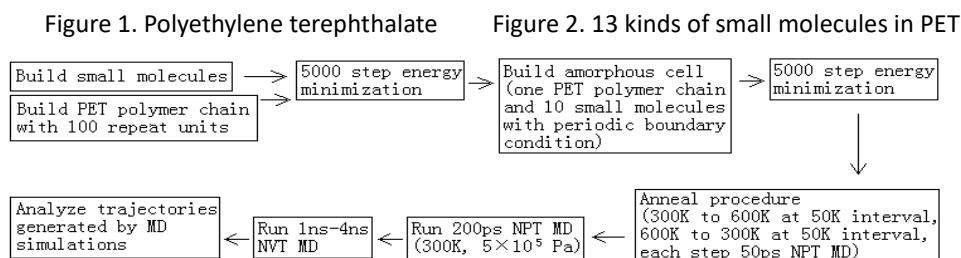


Figure 3. Schematic figure of MD simulation

The structure of PET is shown in Figure 1, and the structures of 13 kinds of small molecules with molecular weights ranging from 32 to 339 g.mol<sup>-1</sup> in PET are shown in Figure 2. The model building and simulation procedure are similar to the authors' previous studies<sup>[13-15]</sup>. Here, the schematic figure of MD simulation is only given in Figure 3, and the details can refer to the references<sup>[13-15]</sup>. When the final NVT (the number of molecules  $N$ , volume  $V$  and temperature  $T$  of the system are kept constant) MD simulation is completed, the atomic trajectory is recorded every 5 ps for the subsequent analysis.

## Results

The mean-squared displacement (MSD) curves for long times are obtained by analyzing the atomic trajectories. MSD curves for 13 kinds of small molecules in PET at different temperatures are shown in Figure 4.



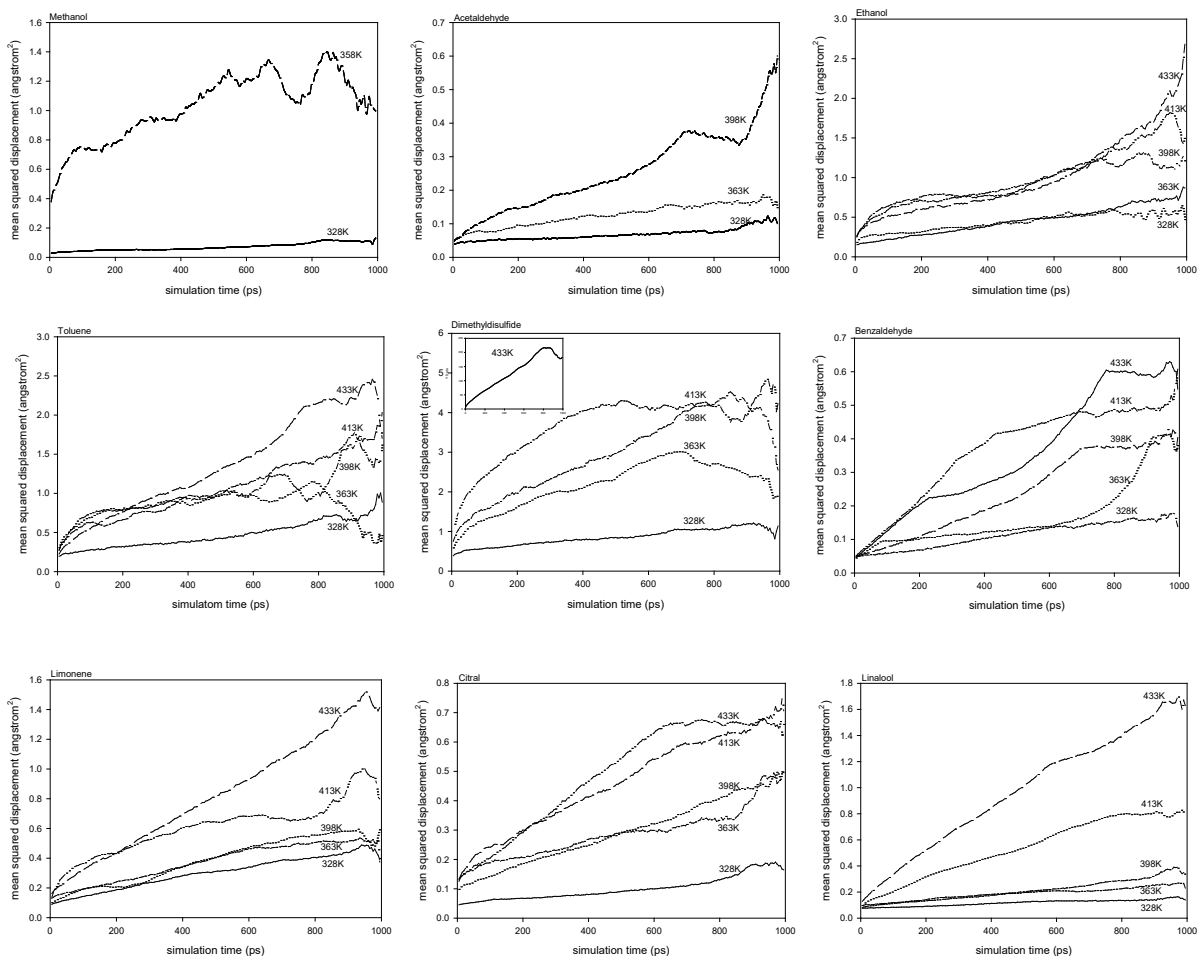


Figure 4 MSD curves for small molecules in PET at different temperatures

It can be observed from Figure 4 that the MSD curves for m-Xylene, limonene, linalool and tetracosane at five temperatures are almost linear, but for other molecules the curves are not satisfactorily linear. In order to obtain perfect linear MSD curves, longer simulation times are required. This may be results from the stronger interactions between the small molecules and the polymer matrix, such as hydrogen bond.

### 3.1 Diffusion Coefficients

The glass transition temperatures  $T_g$  of pure and amorphous PET are about 80°C and 65°C, respectively. Above  $T_g$ , polymer segmental motions occur, whereas below  $T_g$ , they are frozen. Diffusion of small molecules in a rubbery polymer can be safely calculated by employing MD simulation and invoking the Einstein relation. In this paper, simulation temperatures are all above the  $T_g$  of amorphous PET except for one temperature 328K. The diffusion coefficients of small molecules in PET are calculated from the slope of the linear fitting of MSD curves by Einstein relation. The simulated diffusion coefficients are listed in Table 1.

Table 1. Simulated diffusion coefficients ( $\text{cm}^2/\text{s}$ ) of 13 kinds of small molecules

Molecules	No	Molecular weight	328K	363K	398K	413K	433K
Methanol	1	32	1.33E-09	8.06E-09			
Acetaldehyde	2	44	7.32E-10	1.61E-09	6.02E-09		
Ethanol	3	46	5.89E-09	5.92E-09	1.07E-08	1.09E-08	1.57E-08
Toluene	4	92	1.52E-09	2.30E-09	2.32E-09	2.45E-09	7.31E-09
Dimethyl disulfide	5	94	1.15E-08	5.05E-08	6.57E-08	1.00E-07	4.06E-06
Benzaldehyde	6	106	1.01E-10	1.16E-10	1.07E-09	2.44E-09	3.88E-09
m-Xylene	7	106	2.59E-10	1.21E-09	3.19E-09	8.85E-09	6.41E-08
Ethyl-butylate	8	116	3.17E-09	5.01E-09	9.55E-09	1.03E-08	1.15E-08
Chloroform	9	119	7.83E-09	8.28E-09	3.78E-08	3.10E-08	6.37E-08
Limonene	10	136	4.17E-09	4.26E-09	4.39E-09	4.75E-09	2.19E-08
Chitral	11	152	1.58E-09	1.12E-09	3.53E-09	8.21E-09	9.06E-09
Linalool	12	154	1.31E-10	1.43E-10	1.48E-10	5.73E-10	8.95E-09
Tetracosane	13	339	2.52E-09	6.33E-09	1.07E-08	1.13E-08	1.66E-06

Reynier<sup>[16-17]</sup> defined three different diffusion behaviors: (1) diffusion behavior is the same as that of linear alkanes with the same molecular weight; (2) diffusion behavior is lower than that of linear alkanes with the same molecular weight; (3) intermediate behavior. Molecules behaving as the first class diffusion behavior are linear or approximately linear molecules, the second class molecules are spherical molecules, and the third class molecules have both linear parts and spherical parts. Linear molecules diffuse faster than spherical molecules with the same molecular weight, which has been confirmed. According to the classification, 13 small molecules studied in this paper can be divided such that molecules 1, 2, 3, 5, 8 and 13 belong to the first class, molecules 4, 6, 7 and 9 the second class, and molecules 10, 11, 12 the third class. For molecules 1, 2 and 3, three linear molecules and smallest molecules in this paper, the diffusions are relative to their structures of linear molecules, and the diffusion coefficients by simulation are very close to their corresponding theoretical predictions and experimental values<sup>[18]</sup>. The molecules 4 and 5, with almost similar molecular weight, have quite different diffusion coefficients and the diffusion of the molecule 5 is much faster than that of the molecule 4 because the molecule 5 is a linear one and the molecule 4 is a spherical one. The molecules 6 and 7 are observed to have almost the same diffusion coefficients, which is probably because they have the same molecular weight and similar shape (spherical molecule). This case also occurs among molecules 10, 11 and 12. The molecular 13, in spite of the largest molecular weight, doesn't show the smallest diffusion coefficient because it is linear alkane and diffuses faster.

### 3.2 Free Volume

Polymer matrix consists of the occupied volume and free volume. The volume which is not occupied by the matrix atoms is usually defined as "free volume". Free volume plays an important role in the diffusion behavior of small molecules in the polymers. The calculation of free volume adapts the Connolly surfaces methods. The Connolly surface is calculated when the probe molecule with the radius rolling over the Vander Waals surface, and the free volume is defined as the volume on the side of the Connolly surface without atoms. The morphology of free volume is shown in Figure 5.

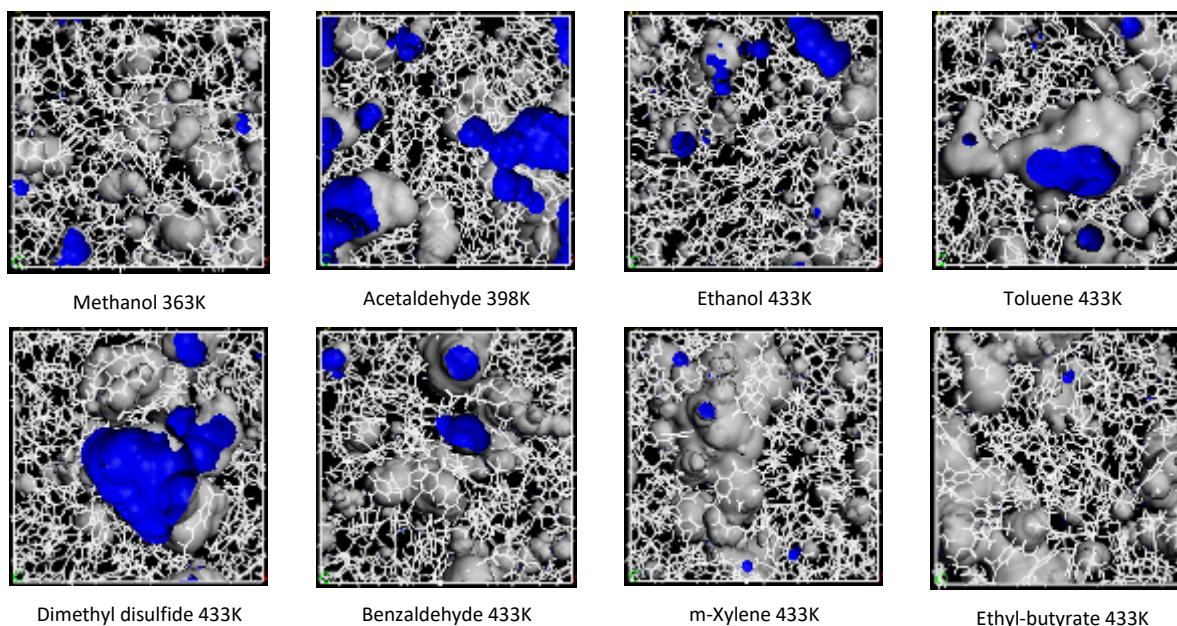


Figure 5. The simulated morphology of free volume: “blue” for high-energy surface and “gray” for low-energy surface of free volume (to reduce the size of the file, some pictures have been taken out)

Figure 6 Diffusion trajectories of migrant molecules in packing models during 1ns MD simulation

## Discussion

The simulated morphology consists of many different shapes and size free volume cavities, and these free volume cavities are mutually connected. Some of them are connected to flaky area, such as Acetaldehyde, Toluene, Dimethyl disulfide, Limonene, Linalool. When small molecules move into the flaky free volume cavities, they tend to move forward rather than coming back and forth, which is available to diffuse from one cavity to another cavity of free volume. The movement of migrant molecules strongly depends on two aspects. One is the properties of free volume, such as the shapes, size, and amount of free volume. Another is temporary channels between adjacent cavities in the polymer matrix. The frequency of temporary channels forming is determined by the mobility of polymer segment. The channel changes faster when the segment moves faster. With the segment movement, some smaller cavities of free volume have more chance to conjoin one larger cavity enough to accommodate the migrant molecule. At the same time the migrant molecule uses temporary channels to diffuse from one cavity to another cavity.

Figure 6 shows the diffusion trajectories of migrant molecules during 1ns MD simulation. The diffusion trajectories of small molecules show the difference of species. The movement trajectories of molecules 1, 2, 3, 5, 8 and 13 distribute very widely, which suggests that the movements of these molecules in polymer are very vigorous. The movement trajectories of small molecules 4, 6, 7 and 9 overlap densely, which suggests that the movements of these molecules in polymer are not vigorous. The movement trajectories of molecules 10, 11, 12 are between those of the first class and the second class and have a wide range of distribution with some

overlap. The diffusion trajectory strongly depends on the molecular shape and weight, which is consistent with the simulated diffusion coefficient.

## Conclusion

The diffusion coefficients of 13 kinds of small molecules with molecular weights ranging from 32 to 339 g/mol in amorphous PET are calculated based on molecular dynamics simulation. The results suggest that diffusion coefficient of migrant depends not only its molecular weight but also its molecular shape. Connolly surface method is used to calculate free volume of polymer matrix. The results show that some small free volume cavities conjoin together and form the larger cavities which exactly accommodate migrant molecules. Thus, it facilitates the diffusion of migrant molecules in polymer matrix. The diffusion trajectories suggest that the molecules in first class move actively, but the molecules in third class move limitedly. The movement mobility of molecules in second class is between that of first class and third class. The diffusion trajectory of small molecules strongly depends on the shape and molecular weight, which is consistent with the simulated diffusion coefficient.

## References

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- [2] Piringer OG. Evaluation of plastics for food packaging. *Food Additives and Contaminants* 1994; 11(2), pp. 221-230.
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- [11] Begley TH, Castle L, Feigenbaum A, et al. Evaluation of migration models that might be used in support of regulations for food-contact plastics. *Food Additives and Contaminants* 2005; 22, pp. 73-90.

## Acknowledgments:

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## SPEAKER GUIDE

### Important Speaker Dates

- **Speaker Registration Due (acceptance on the program):** (Date to Be Determined)
- **Final Abstracts due:** (Date to Be Determined)
- **Speaker Headshot Image Due (Website/App):** (Date to Be Determined)
- **PowerPoint Presentations Due (widescreen format 16:9):** (Date to Be Determined)
- **2-minute Oral Posters Presentations Due:** (Date to Be Determined)
- **Posters Installed:** (Date to Be Determined)

### Program Outline

- **Optional Communities of Practice Sessions & Welcome Reception:**
- **Conference Day 1:**
- **Conference Day 2:**
- **Conference Day 3:**

### CONFERENCE PROCEEDINGS

All accepted abstracts (short and extended )will be published, either in printed format or electronically, in an IAPRI handout and distributed to the attendees at the conference. Each research presenter shall write a 4-8 page paper that will be available in the Conference Proceedings in PDF format after the conclusion of the conference. Other papers may be selected by the Scientific Committee as a research paper to be published by IAPRI. In addition, some may be considered for possible expansion into a peer review paper for publication by an external publisher. You will be personally contacted by conference organizers if your abstract is to advance.

### OPTIONAL SOCIAL MEDIA AND PROMOTIONAL 3-MINUTE PITCH INSTRUCTIONS

Each accepted presenter is asked to consider providing IAPRI with a short social media ready write-up promoting their presentation. Additionally, consider a 3-minute video pitch presentation that is no longer than 3 minutes duration, no more than 4 static PowerPoint slides in length.

We request that all promotional materials be emailed to (email address) by (Date to Be Determined).

### AUDIO VISUAL

Basic audio visual will be provided as follows:

- Small stage with steps
- Data projector and screen (16:9 ratio)
- Lectern and microphone
- Handheld wireless microphone
- Wireless clicker for advancing PowerPoint slides

There will also be an audio-visual technician in the room to aid with loading your presentation and any last-minute technical checks.

## **SPEAKER REGISTRATION**

All accepted speakers are required to register for the conference by (Date to Be Determined) to confirm their position on the program.

If you do not register as a speaker by the deadline, your presentation may not be included in the conference program.

## **HEADSHOT IMAGE**

Please send a headshot image to ? to accompany your speaker biography on the conference website. Your biography has already been collected through the abstract submission process and will be published as is on the conference website. Please provide your headshot image prior to (Date to Be Determined).

## **ORAL PRESENTATIONS**

Your Oral Presentation must be 20 minutes in length. There will be a 5 minute Q&A at the conclusion of the session.

## **SPEAKER POWERPOINTS:**

- PowerPoint presentations are needed in **16:9 (widescreen) format**.
- Videos are to be embedded in your PowerPoint slide rather than inputted as external links.

### *Tips for Creating your PowerPoint Presentation*

#### **Body Text:**

- Use a font that is easy to read. Arial, Verdana or Calibri tend to be the easiest to read on screens.
- Font should be no smaller than 18pt.
- Align text left. Centered text is harder to read.
- Write in point form, not complete sentences.
- Include 4-5 bullet points per slide.
- Avoid wordiness and clutter: A headline, a few bullet points, maybe an image – anything more than that and you risk losing your audience.

#### **Headings:**

- Heading font should be bigger than your body text.

#### **Color:**

- Put dark text on a white background. This is easiest to read. If you must use a dark background – for instance, if your institute/company uses a standard template with a dark background – make sure your text is quite light (white, cream, or light grey) and increase the font size.



## **Images, Charts and Diagrams:**

- A chart, diagram or image can often convey much more to your audience than text.
- Don't use low resolutions images as these can appear blurry on the screen.

## **Slide Timing:**

- Anticipate no more that 1-2 slides per minute for your presentation.

For more information about PowerPoint or sample PowerPoint templates please click [here](#).

## **POSTER DISPLAY INSTRUCTIONS**

Posters will be displayed for a part of the conference.

Posters will need to be erected by presenters in the exhibition on (Date to Be Determined), in the morning before sessions begin at (Time to Be Determined) am, please note that the exhibition area will be accessible from ?am.

Please bring along Velcro dots in order to affix your presentations to the poster boards provided.

Posters can be removed and collected by presenters at the conclusion of sessions on (Date to Be Determined). Please note that any uncollected posters will be considered abandoned and disposed of accordingly.

Finally, we ask that all poster presenters be near their posters during the poster breaks to be available to delegates, should they have any questions.

The posters will need to be prepared and printed in ? size (? x ?). The layout will need to be vertical as this is the way the poster boards will be set up at the venue. Authors will need to bring their poster with them to the conference already printed and laminated.

## **3-MINUTE ORAL POSTER PITCH INSTRUCTIONS**

All 3-minute oral poster pitch presentations must be no longer than 3 minutes duration and no more than 4 static slides in length.

All presentations must be created using Microsoft PowerPoint.

We request that all presentations (i.e. PowerPoint presentation) be emailed to (Email to Be Determined) by (Date to Be Determined). A reminder email will be sent to you closer to the due date.

## **COMMUNITIES OF PRACTICE SESSIONS**

CoP sessions will be presented on (Date to Be Determined). These session are optional for all IAPRI members.