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| Book Name: | [**Science and Technology: Developments and Applications**](https://www.bookpi.org/bookstore/product/science-and-technology-developments-and-applications-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4450** |
| Title of the Manuscript:  | **Dependence of the friction durability of extremely thin diamond-like carbon films on film thickness** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments |
|  | Reviewer’s comment**Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** |  |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** |  |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. |  |  |
| **Is the manuscript scientifically, correct? Please write here.**  |  |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** |  |  |
| Is the language/English quality of the article suitable for scholarly communications? |  |  |
| Optional/General comments | **Reviewer comments to the author:-** 1. How do the movement styles and contact pressures of the three friction tests influence the evaluation of film durability?
2. What mechanisms contribute to the higher friction coefficient and lower durability of films less than 0.4 nm thick?
3. Why does friction durability increase significantly at a certain film thickness, and what factors determine this threshold?
4. Based on this research, cite the below mentioned article:-

https://doi.org/10.1007/s12541-024-01095-4https://doi.org/10.1134/S1052618824700304https://doi.org/10.17559/TV-20230811000871https://doi.org/10.1177/22808000231214359https://doi.org/10.1007/978-3-031-49826-8\_11https://doi.org/10.1007/s40033-024-00647-2https://doi.org/10.1007/s12008-024-01747-9 https://doi.org/10.1007/s11665-024-09915-41. How do the structural and compositional differences between FCVA-DLC and P-CVD-DLC films contribute to their differing durability performance?
2. What are the potential limitations of using only three friction tests to generalize the durability of FCVA-DLC and P-CVD-DLC films?
3. How do these findings compare with previous studies on ultra-thin DLC films, and what implications do they have for practical applications?
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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in details)* |  |

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| **Reviewer Details:** |
| Name: | **A. Bovas Herbert Bejaxhin** |
| Department, University & Country | **Saveetha School of Engineering, Saveetha Institute of Medical and Technical Science, India** |