|  |
| --- |
| Citations of your earlier work have been added to the work, and as it turned out, several Figures (1, 2, 8) and graphs (Fig. 4-7) were also used in this work. I treat it as plagiarism and unacceptable activity / ethical concerns. Please don't treat an open access journal as an opportunity to publish anything for money. |

 Dear Reviewer and Academic editor,

It is very unfortunately that we could not to explain the simple and cute idea of this study: to test the Barker’s and to work out author’s model of polymers’ and FRPs’ CTe-MoE relation. And in range of this original task, there was used the base of previous researches and methods, but no plagiarism at all.

As the first author, I notice that presented study is really the final study of wide research in polymers’ and FRPs’ properties modelling using original supramolecular domain polymer structure model. This research includes following studies all presented in Polymers:

1. Korolev, A.; Mishnev, M.; Zherebtsov, D.; Vatin, N.I.; Karelina, M. Polymers under Load and Heating Deformability: Modelling and Predicting. Polymers 2021, 13, 1-14, https://doi.org/10.3390/polym13030428.
2. Korolev, A.; Mishnev, M.; Zherebtsov, D.; Vatin, N.I.; Karelina, M. Polymers under Load and Heating Deformability: Modelling and Predicting. Polymers 2021, 13, 1-14, https://doi.org/10.3390/polym13030428.
3. Korolev, A.; Mishnev, M.; Zherebtsov, D.; Vatin, N.I.; Karelina, M. Polymers under Load and Heating Deformability: Modelling and Predicting. Polymers 2021, 13, 1-14, https://doi.org/10.3390/polym13030428.

And

1. Korolev, A.; Mishnev, M.; Zherebtsov, D.; Vatin, N.I.; Karelina, M. Polymers under Load and Heating Deformability: Modelling and Predicting. Polymers 2021, 13, 1-14, https://doi.org/10.3390/polym13030428.

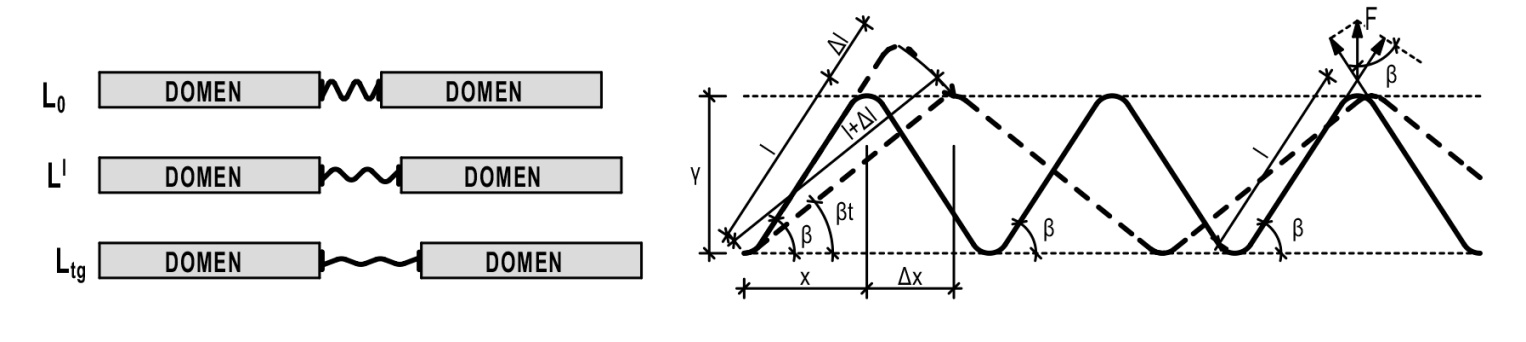
The development of this studies concluded in realizing of supramolecular domain structural model of polymers on the base of experimental studies in the beginning; and following math modelling of elastic and thermal properties using author’s structural model in the final researches. Due to that for math models’ testing some tests and methods were repeated for in-situ approbation providing. The thermo-relaxation, the DMA and TG analysis, the MoE under heating tests were repeated on each new stage of modelling. And we think that repeating and very close parameters after tests in different times is not the proving of plagiarism but proving of experiments’ truth for every scientist. Concretely:

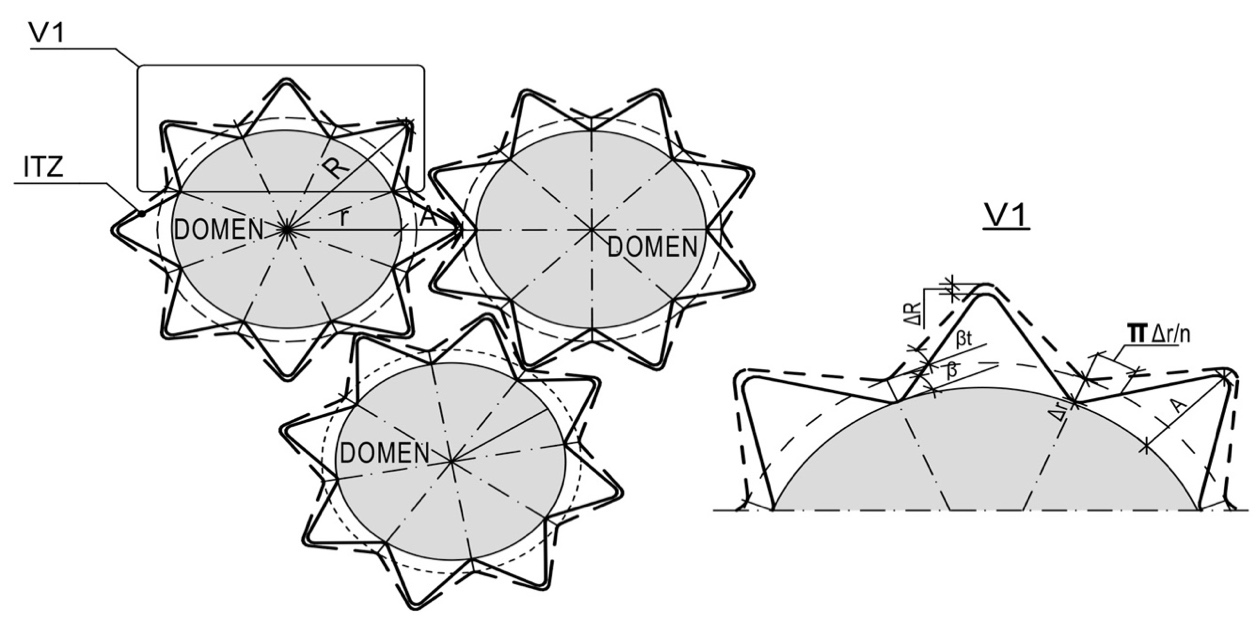
1. Figures 1, 2 – is a repeating of dilatometric method as in previous research but for **other samples and compositions testing**
2. Figures 4-7 are looking like but **not the same graphs,** the same method but there is repeating of epoxy samples of new party and other not repeated compositions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **№** | **Composite** | **Name** | **Dilatometry** | **Modulus of elasticity** |
| 1 | Epoxy binder | EP | + | + |
| 2 | Epoxy binder + glass fabric T23 | EP+T23 | + | + |
| 3 | Epoxy binder 70% + fly ash 30% | EP+FA | + | + |
| 4 | Epoxy binder 70% + fly ash 30% + glass fabric T23 | EP+T23+FA | + | + |

Compositions 3, 4 were not in previous researches, compositions 1, 2 are repeating with new samples, and the repeating presents the adequateness of experiments and conclusions.

1. The Fig 8 is the same as in previous research but here is modification in tensile force distribution presented in this study but not presented in previous. Pay the attention to the right upper corner of Fig 8, it’s a little modification but significant, little doesn’t mean not significant.





**Figure 8.** Two-phase relaxation model of polymer expanding under heating.

1. “don't treat an open access journal as an opportunity to publish anything for money”. It’s very sad that we scientists can throw the words. I collaborate with MDPI two years but It wasn’t ever. As for me, I, Korolev Alexander is working in South Ural State University from 1999, more than 20 years, I have about 100 articles, monographs, patents, I ruled and educated more than 1000 engineers, 2 PhD. And more, as an engineer I worked on constructions of plants, buildings with Turkey, Chinese, Serbian and other colleagues, and the first time for 25 years of working I hear that personally. I think that It is unacceptable anyway. I notice that in this study we suggested new model of CTe-MoE relation for the first time from 1965, and in these coordinates the scientific discussion has to be. Adding to this lets take care to other three reviewers, too large difference.

In conclusion we hope that we will clear all misunderstanding. We added the comments about experimental repeating and Fig modifications in manuscript and highlighted it. We beg you to study our resubmitted research carefully in development of all previous studies.

Best regards,

Korolev A. and Authors