Towards Understanding of Advanced Theoretical R&D Concepts w.r.t COVID-19 Vaccine Mixing R-D Mechanisms by Using COT/HOL - Isabelle System based Deep Learning [DL]/[R-D]/[CA] HOL Libraries in JVM-Related Heterogeneous Computing Environment/s involving Nano-Bio Systems.

[DL -> Deep Learning /R-D -> Reaction Diffusion Mechanisms /CA -> Cellular Automata /JVM - > Java Virtual Machine]
[COT - Chemical Organization Theory/CC - Chemical Computing/CP - Chemical Program /CAlg - Chemical Algebra]
[IT is GOOD to learn about DNA/RNA Sequencing w.r.t COVID-19]

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[I] Main Idea + Inspiration + Introduction :

as explained in this TITLE -> Short Technical Notes. Is Vaccine Mixing a good idea ?
Let us explore.

[II] HOL based R&D Bio-informatics Using High Performance Computing Platform/s :

COT/CC/CP/CAlg -> Vaccine [A] + Vaccine [B] or Vaccine [B] + Vaccine [C]
or Vaccine [A] + Vaccine [C]
or something similar then study the R-D Mechanisms and efficacy % using theoretical methods.

Here we could use or consider : Vaccine [A] -> Sputnik V
Vaccine [B] -> COVAXIN
Vaccine [C] -> COVISHIELD etc....

For the sake of discussion we have suggested these vaccines.

[Theoretical Investigations Under Progress]

We are rigorously TESTING the above mentioned idea using the following publication/s :

Reaction-Diffusion Cellular Automata Framework-based Understanding of Radiation-induced Effects from Alpha-particles on the Performances of Microprocessors/FPGAs/Other Electronic Devices using Higher Order Logic (HOL) System and CAVA Library in the R&D of Semiconductor Industry by Nirmal Tej Kumar, Michelle Ayres de C. Pinto, Gagik Shmavonyan - DOI:10.5958/0975-8089.2018.00004.0

http://www.scienpress.com/Upload/JAMB/Vol%202_2_6.pdf -> Journal of Applied Mathematics & Bioinformatics, vol.2, no.2, 2012, 65-79 ISSN: 1792-6602 (print), 1792-6939 (online)Scientific Press, 2012.

www.yourebeingmanipulated.com/2020/09/22/does-the-novel-coronavirus-contain-hiv-related-genes/

https://www.intechopen.com/books/gene-therapy-tools-and-potential-applications/dna-electrotransfer-an-effective-tool-for-gene-th...

Designing a chemical program using chemical organization theory Naoki Matsumaru, Thorsten Lenser, Thomas Hinze, and Peter Dittrich Bio Systems Analysis Group; http://www.minet.uni-jena.de/csb/Jena Centre for Bioinformatics (JCB) & Department of Mathematics and Computer Science Friedrich-Schiller-University Jena, D-07743 Jena, Germany;

*** Please Make a Note : We are not interested in discussing full details as we are having some interest/s in our TESTING approaches.**

*** However,our main idea itself should be sufficient to derive an Informatics Framework.**

[III] Important & Useful References w.r.t our TITLE :

[a] Chemical Organization Theory as a Theoretical
Base for Chemical Computing -> http://www.minet.uni-jena.de/csb/
{in: Workshop on Unconventional Computing C. Teuscher, A. Adamtzky, Editors,pp. 71-83, Luniver Press, Beckington, 2005, ISBN 978-0-9551170-0-8 }

[b] https://isabelle.in.tum.de/

[c] https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics

[d] https://www.isa-afp.org/ -> HOL Libraries for your R&D.

[e] https://www.jikesrvm.org/

[f] https://www.snopes.com/news/2020/04/01/covid-19-bioweapon/

[g] https://www.statnews.com/2020/02/03/retraction-faulty-coronavirus-paper-good-moment-for-science/

[h] https://www.medicalnewstoday.com/articles/covid-19-vaccines-immunity-and-new-variants-the-role-of-t-cells

[i] https://sputnikvaccine.com/ [j] https://www.bharatbiotech.com/covaxin.html

[k] https://www.seruminstitute.com/product_covishield.php

[IV] Acknowledgment/s:

Sincere Thanks to all WHO made this happen in my LIFE.
Non-Profit R&D. Inspire Others Always.

[V] Conclusion/s With Future Perspectives :

Could be very useful approach w.r.t COVID-19 related Bio-informatics Platform.
We expect many more communications to follow in this domain.With new mutations of COVID-19 in the picture we need to re-design our R&D approaches to contain this PANDEMIC.Testing in progress @ the time of submission.With Thanks - Dr.Nirmal.

[THE END]