

[Review Form 3](#)

Book Name:	Science and Technology: Developments and Applications
Manuscript Number:	Ms_BPR_3997
Title of the Manuscript:	Developing a Tripartite Mechanism of Emotive Memory
Type of the Article	Book chapter

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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.	This manuscript addresses a longstanding question of how emotive (or "affective") memory is encoded and retrieved at the molecular and cellular levels. It proposes an innovative "tripartite mechanism" in which the neuron, the extracellular matrix, and trace metals/neurotransmitters work in unison. The work is highly relevant to researchers studying the biological basis of cognition and emotion, as well as to those interested in bridging neuroscience with chemistry and materials science. It also has potential implications for understanding and treating neurodegenerative conditions, emphasizing the importance of further exploration of this model.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title, "Developing a Tripartite Mechanism of Emotive Memory," is concise and accurately reflects the central concept of the manuscript. It should be suitable for attracting the attention of readers in neuroscience, cognitive science, and related fields.	
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.	The abstract covers the major aspects: the problem statement (how biological memory differs from purely computational or binary memory), the proposed mechanism (tripartite model), and broader implications. It is mostly comprehensive. A minor suggestion: explicitly highlight how emotive aspects (trace metals, neurotransmitters) tie together with the extracellular matrix to form "cognitive units of information."	
Is the manuscript scientifically, correct? Please write here.	The manuscript provides a plausible mechanistic framework, well grounded in existing literature. It references fundamental studies on the roles of neurotransmitters, trace metals, and the extracellular matrix. The conceptual jump to a "tripartite mechanism" is scientifically sound as a hypothesis that can stimulate further empirical research. The authors should emphasize in the text any experimental or in vitro/in vivo support (if available) for the formation of stable metal-NT complexes in the brain matrix, as this is a key part of their argument.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	The references are extensive and include classical and recent works. They cover the historical development of neuroscience, from bacterial signaling to advanced brain research, and also mention neurodegenerative pathophysiology. In my view, the references are quite sufficient. If further recency is desired, the authors might consider adding 1-2 new reviews on the role of glycosaminoglycans or matrix biology in higher cognitive functions published in the last year or two, but this is optional.	

Review Form 3

<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language is clear and readable, though dense in scientific terminology. Overall, the manuscript is suitable for scholarly communication. Minor editorial polishing would help, but there is no major issue.</p>	
<p>Optional/General comments</p>	<p>The manuscript is fairly extensive and covers a breadth of topics, including bacterial signaling, evolution, neurobiology, and the concept of consciousness. The authors might consider organizing the sections with more subheadings or bullet points for clarity, especially to help readers navigate from simpler organisms (bacteria/slime molds) to advanced mammalian brains. Also, a short paragraph summarizing how “tripartite memory” differs from “synaptic plasticity” models would be beneficial.</p> <p>The manuscript is scientifically robust and offers a valuable perspective on emotive memory. Minor clarifications in text structure and a bit more emphasis on experimental data (if available) would strengthen it.</p> <p>There do not appear to be any direct ethical concerns. No human or animal experimentation is described in detail, and the manuscript focuses on theoretical mechanisms and existing literature.</p>	

PART 2:

	<p>Reviewer’s comment</p>	<p>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)</p>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

<p>Name:</p>	<p>Soumya Prakash Biswal</p>
<p>Department, University & Country</p>	<p>KIIT University, India</p>