

Report for the article entitled 'Geometry of Projective Tensor of
Vaisman-Gray Manifold' (BJMCS 23358).

In 1980, A. Gray and M. Harvella classified the almost product manifolds according to the structure properties by the help of actions of unitary group. One of important classes in this classification is the Vaisman-Gray manifolds.

In the present paper under review, the author(s) investigate(s) the Vaisman-Gray manifolds with flat projective curvature tensor. From my opinion of view, this paper is interesting but it is not ready for publication in its present presentation for the following reasons:

1. Abstract of this paper should be written 'In this paper, the Vaisman-Gray manifolds with flat projective curvature tensor are investigated. It is shown that which conditions are necessary for a Vaisman-Gray manifold with flat projective curvature tensor is a nearly Kaehler (NK) manifold, a locally conformal Kahler (LCK) manifold and an Einstein manifold'.
2. In the first paragraph of Introduction, Historical development of Vaisman-Gray manifolds should be well expressed and some of studies related to these manifolds in the literature should be mentioned. Also, I think the second paragraph is not necessary since the author doesn't use the Kirichenko's result and the Abood and Mohammed's result [5] anywhere in the text.
3. The author(s) should do right dot and comma usages in the text. For example, at the end of the equations, dot (or comma) should be written.
4. *On page 1, line 6 from bottom:* 'a' should be added between 'be' and '2n-dimensional'. 'the' should be added 'and' and ' $\chi(M)$ '.
line 2 from bottom: comma should be removed. ($J_p^2 = -id$).
On page 2, at the end of equation (2.1): comma should be written and 'Where' should be written 'where'.
In Definition 2.1: the equation should be written

$$B^{abc} = B^{-bac}, \quad B_c^{ab} = \alpha^{[a\delta_c^b]},$$

where $B^{abc} = \frac{\sqrt{-1}}{2} J_{[\bar{b}, \bar{c}]}^a$, $B_c^{ab} = -\frac{\sqrt{-1}}{2} J_{\bar{b}, c}^a$ and $\alpha = \frac{1}{n-1} \delta F \circ J$. Here, F is ...

Consequently, the authors must carefully proofread the final version of this paper.

5. A VG-manifold with a flat Ricci tensor and flat projective curvature tensor is also a flat manifold.

The paper K. Takamatso and T. Sato [A K space of constant holomorphic sectional curvature, Kodai Math. Sem. Rem. 27, 1976] indicates that there does not exist any dimensional, except 6-dimensional, non-Kaehlerian nearly Kaehler manifold of constant holomorphic sectional curvature. According to Takamatso and Sato's result and Theorem 3.4 in the text, one of the following conditions occurs:

- a. M is a non-Kaehlerian nearly Kaehlerian manifold of dimension 6.
 - b. M is a flat Kaehlerian manifold.
6. I recommend to the author(s) for reading (especially the section 8) the article of A. Gray [Nearly Kähler manifolds, J. Differ. Geo. 4, (1970)]. I think the author(s) could improve his/her/their results by the help of this article.