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The following ALERTS were generated. Each ALERT has the format  
**test-name\_ALERT\_alert-type\_alert-level.**

Click on the hyperlinks for more details of the test.

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 **Alert level B**

PLAT911\_ALERT\_3\_B Missing FCF Refl Between Thmin & STh/L= 0.600 140 Report

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 **Alert level C**

RINTA01\_ALERT\_3\_C The value of Rint is greater than 0.12

Rint given 0.140

PLAT222\_ALERT\_3\_C NonSolvent Resd 1 H Uiso(max)/Uiso(min) Range 5.1 Ratio  
PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of C4 Check  
PLAT242\_ALERT\_2\_C Low 'MainMol' Ueq as Compared to Neighbors of C6 Check  
PLAT245\_ALERT\_2\_C U(iso) H1 Smaller than U(eq) N1 by 0.024 Ang\*\*2  
PLAT341\_ALERT\_3\_C Low Bond Precision on C-C Bonds ..... 0.0065 Ang.

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 **Alert level G**

PLAT019\_ALERT\_1\_G \_diffrn\_measured\_fraction\_theta\_full/\*\_max < 1.0 0.991 Report  
PLAT020\_ALERT\_3\_G The Value of Rint is Greater Than 0.12 ..... 0.140 Report  
PLAT066\_ALERT\_1\_G Predicted and Reported Tmin&Tmax Range Identical ? Check  
PLAT764\_ALERT\_4\_G Overcomplete CIF Bond List Detected (Rep/Expd) . 1.19 Ratio  
PLAT794\_ALERT\_5\_G Tentative Bond Valency for Cu1 (II) . 2.15 Info  
PLAT883\_ALERT\_1\_G No Info/Value for \_atom\_sites\_solution\_primary . Please Do !  
PLAT910\_ALERT\_3\_G Missing # of FCF Reflection(s) Below Theta(Min). 1 Note  
PLAT912\_ALERT\_4\_G Missing # of FCF Reflections Above STh/L= 0.600 1 Note  
PLAT963\_ALERT\_2\_G Both SHELXL WEIGHT Parameter Values Zero ..... Please Check  
PLAT967\_ALERT\_5\_G Note: Two-Theta Cutoff Value in Embedded .res .. 52.0 Degree  
PLAT978\_ALERT\_2\_G Number C-C Bonds with Positive Residual Density. 0 Info

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0 **ALERT level A** = Most likely a serious problem - resolve or explain  
1 **ALERT level B** = A potentially serious problem, consider carefully  
6 **ALERT level C** = Check. Ensure it is not caused by an omission or oversight  
11 **ALERT level G** = General information/check it is not something unexpected

3 ALERT type 1 CIF construction/syntax error, inconsistent or missing data  
5 ALERT type 2 Indicator that the structure model may be wrong or deficient  
6 ALERT type 3 Indicator that the structure quality may be low  
2 ALERT type 4 Improvement, methodology, query or suggestion  
2 ALERT type 5 Informative message, check

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It is advisable to attempt to resolve as many as possible of the alerts in all categories. Often the minor alerts point to easily fixed oversights, errors and omissions in your CIF or refinement strategy, so attention to these fine details can be worthwhile. In order to resolve some of the more serious problems it may be necessary to carry out additional measurements or structure refinements. However, the purpose of your study may justify the reported deviations and the more serious of these should normally be commented upon in the discussion or experimental section of a paper or in the "special\_details" fields of the CIF. checkCIF was carefully designed to identify outliers and unusual parameters, but every test has its limitations and alerts that are not important in a particular case may appear. Conversely, the absence of alerts does not guarantee there are no aspects of the results needing attention. It is up to the individual to critically assess their own results and, if necessary, seek expert advice.

### **Publication of your CIF in IUCr journals**

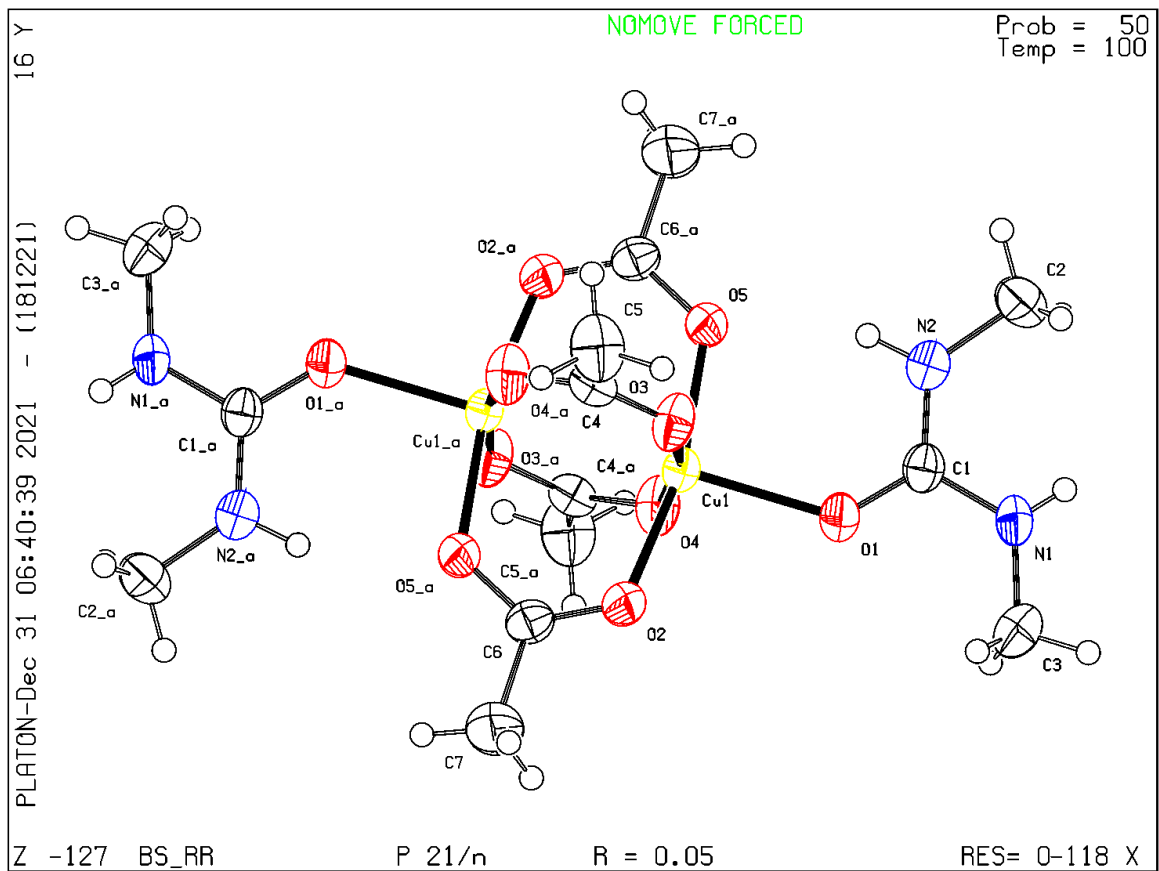
A basic structural check has been run on your CIF. These basic checks will be run on all CIFs submitted for publication in IUCr journals (*Acta Crystallographica*, *Journal of Applied Crystallography*, *Journal of Synchrotron Radiation*); however, if you intend to submit to *Acta Crystallographica Section C* or *E* or *IUCrData*, you should make sure that full publication checks are run on the final version of your CIF prior to submission.

### **Publication of your CIF in other journals**

Please refer to the *Notes for Authors* of the relevant journal for any special instructions relating to CIF submission.

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**PLATON version of 18/12/2021; check.def file version of 18/12/2021**



## ANNEXURE-B

### List of Publications

#### Journals:

- [1] **Saikia, R.**, Dey Baruah, S., Deka, R. C., Thakur, A. J. and Bora, U. An insight into nitromethane as an organic nitrile alternative source towards the synthesis of aryl nitriles. *European Journal of Organic Chemistry*, 2019(36):6211-6216, 2019.
- [2] **Saikia, R.**, Park, K., Masuda, H., Itoh, M., Yamada, T., Sajiki, H., Mahanta, S. P., Thakur, A. J. and Bora, U. Revisiting the synthesis of aryl nitriles: A pivotal role of CAN. *Organic & Biomolecular Chemistry*, 19(6):1344-1351, 2021.
- [3] **Saikia R.**, Boruah, P. K., Ahmed, S. M., Das, M. R., Thakur, A. J. and Bora, U. An Avenue to Chan-Lam *N*-arylation by Cu(0) nanoparticles immobilized graphitic carbon-nitride oxide surface. *Applied Catalysis A: General*, 643:118767, 2022.
- [4] Sarmah, D., **Saikia, R.** and Bora, U. An attractive avenue to Chan-Lam cross-coupling: Scope and developments under Ni-catalysis. *Tetrahedron*, 104:132567, 2022.
- [5] Das, S. K., Dewan, A., Deka, P., **Saikia, R.**, Thakuria, S., Deka, R. C., Thakur, A. J. and Bora, U. Biogenic palladium nanostructures for Suzuki-Miyaura and Sonogashira cross-coupling reaction under mild reaction conditions. *Current Research in Green and Sustainable Chemistry*, 5:100301, 2022.

#### Book Chapter:

- [1] **Saikia, R.** and Saikia, R. A. A study on organic solvents: Its necessity, its impact on the environment and sustainable alternatives, In Narzary, A., Begum, P. and Bhagawati, C., editors, *Environment: Climate Change and Natural Challenges*, Gargaon College Publication Cell & Purbayon Publication, 2021.

## List of Conferences

### As Abstract

#### Oral Presentation:

- [1] **Saikia R.**, Baruah, S. D., Thakur, A. J. and Bora U. *Cu(I)-catalyzed synthesis of aryl/hetaryl nitriles with nitromethane as the in situ cyanide generating source*. Regional Seminar on Science for Sustainable Development (SSD-2019), Organized by Department of Chemistry, B. Borooah College, Guwahati, 9<sup>th</sup> January, 2019.
- [2] **Saikia, R.**, Baruah, S. D., Deka, R. C., Thakur, A. J. and Bora, U. *Nitromethane as an organic nitrile surrogate towards the synthesis of aryl nitriles*. International Conference on Emerging Trends in Chemical Sciences (ETCS 2020), Organized by Department of Chemistry, Gauhati University, Guwahati, 13<sup>th</sup>-15<sup>th</sup> February, 2020.

#### Poster Presentation:

- [1] **Saikia, R.**, Thakur, A. J. and Bora, U. *Cu/g-C<sub>3</sub>N<sub>4</sub> catalyzed Chan-Lam coupling: An expedient, on water approach at room temperature*. Frontiers in Chemical Sciences (FICS), Organized by Department of Chemistry, Indian Institute of Technology, Guwahati, 6<sup>th</sup>-8<sup>th</sup> December 2018.
- [2] **Saikia, R.**, Thakur, A. J. and Bora, U. *An expedient, on water approach to Chan-Lam coupling at room temperature*. OrganiX-2018: An International Conference in Chemistry, Organized by Department of Chemical Sciences, Tezpur University, 20<sup>th</sup>-21<sup>st</sup> December, 2018.
- [3] **Saikia, R.**, Baruah, S. D., Deka, R. C., Thakur, A. J. and Bora, U. *Unwinding the role of nitromethane in the synthesis of aromatic nitriles*. First virtual J-NOST symposium; XVI-J-NOST, Organized by Indian Institute of Science, Bangalore, 31<sup>st</sup> October-1<sup>st</sup> November, 2020.